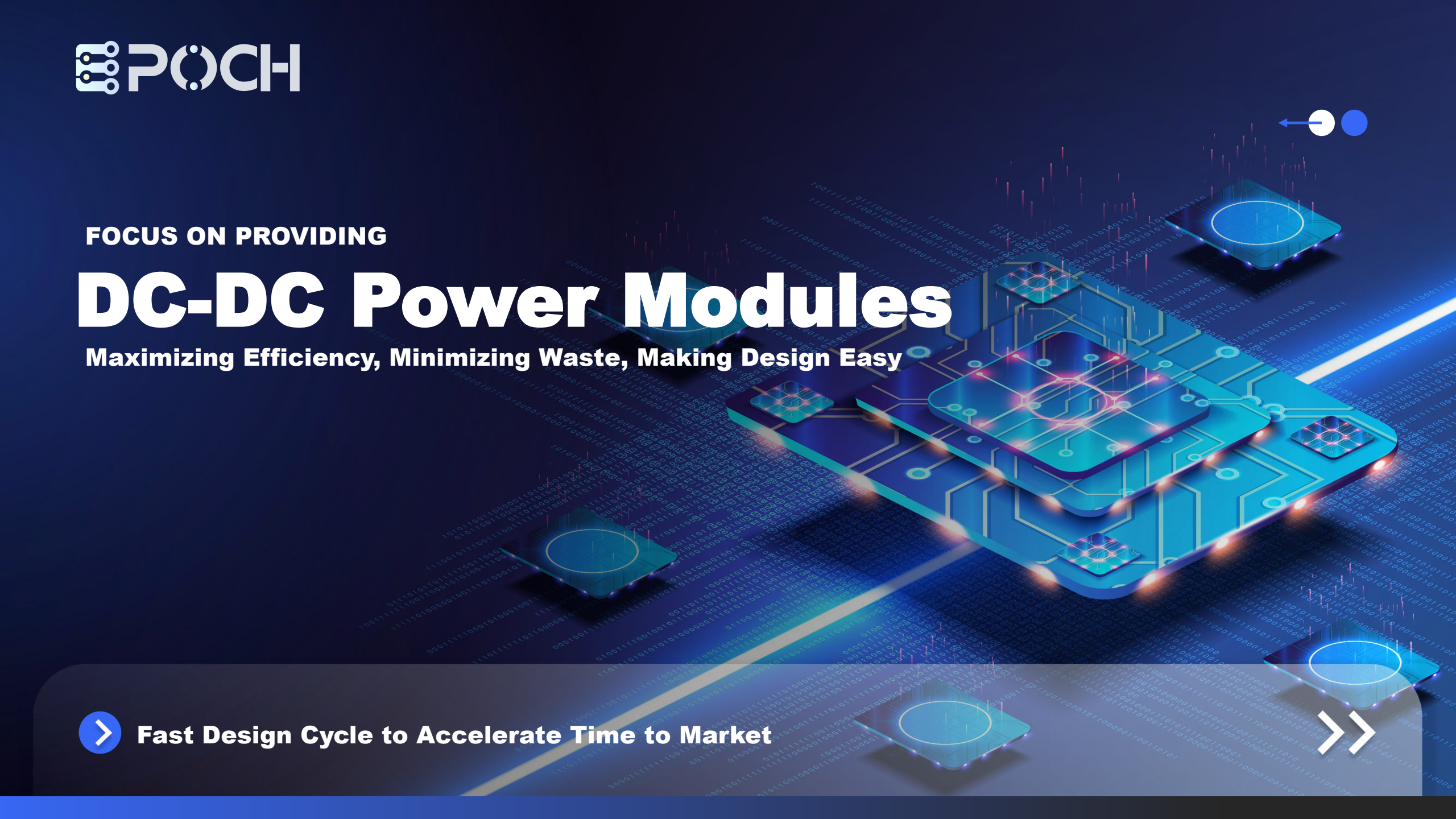
POCH

FOCUS ON PROVIDING

DC-DC Power Modules

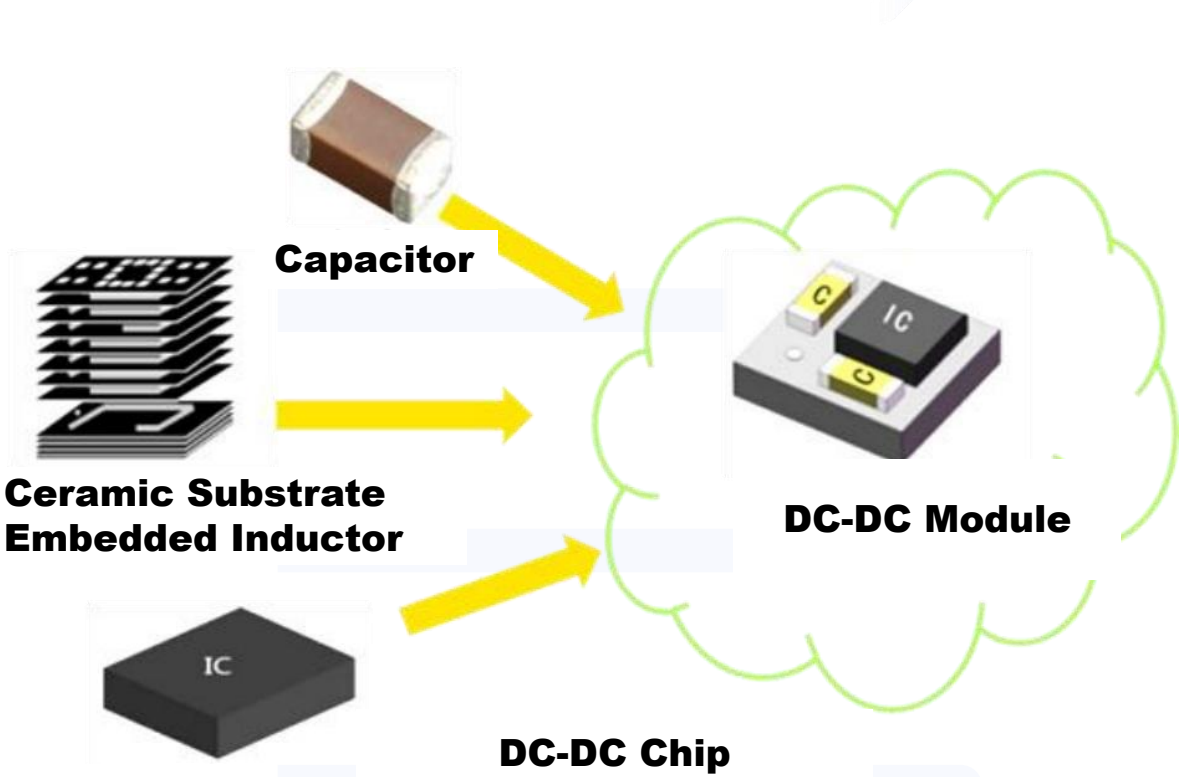
Maximizing Efficiency, Minimizing Waste, Making Design Easy



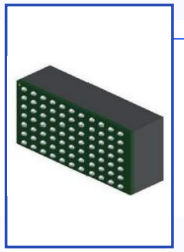
Fast Design Cycle to Accelerate Time to Market

WHY CHOOSE

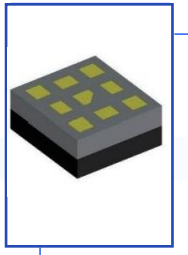
DC-DC Power Modules



Fewer Components, Lower Costs



Miniaturization, Reducing Board Area



Lower EMI

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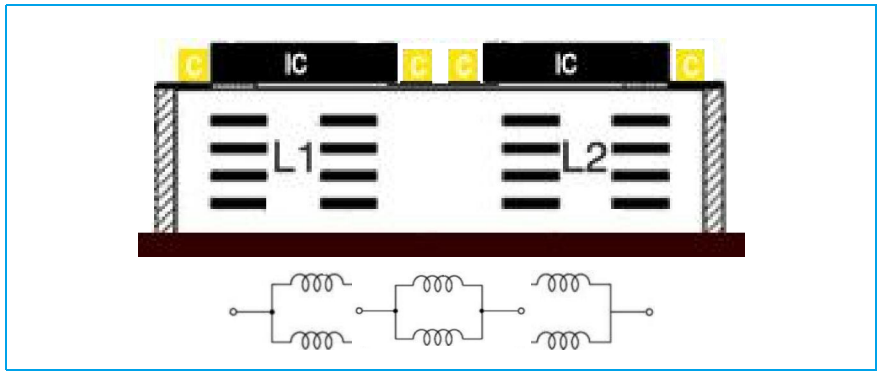
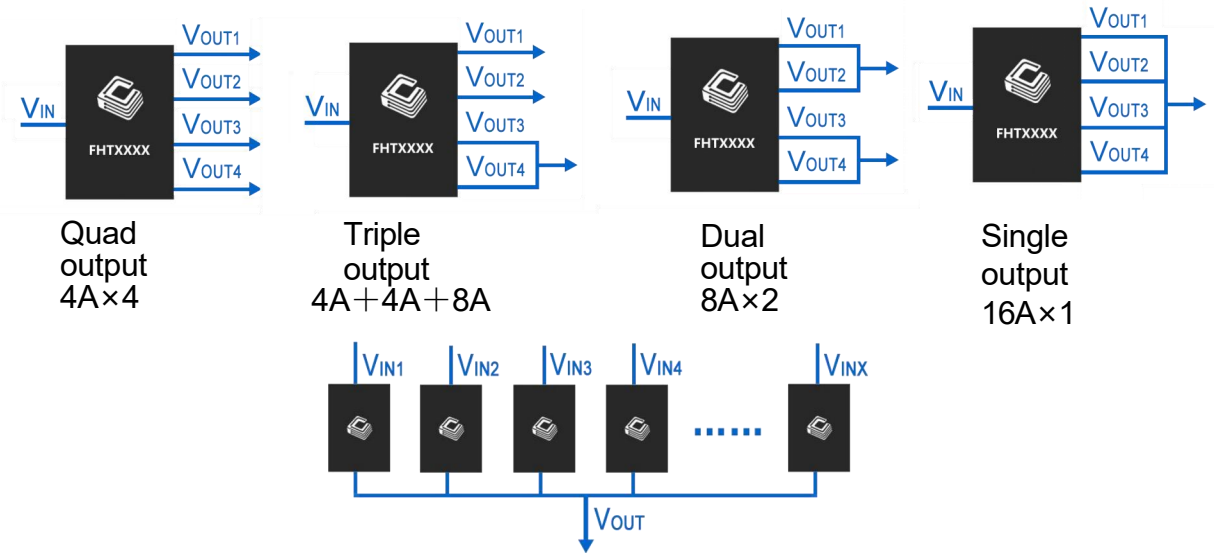
WHY CHOOSE

Embedded Inductor Array PSiP Meets The Multi-Channel Power Supply Requirements





Inductor array and PSiP diagram

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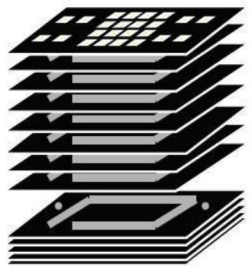
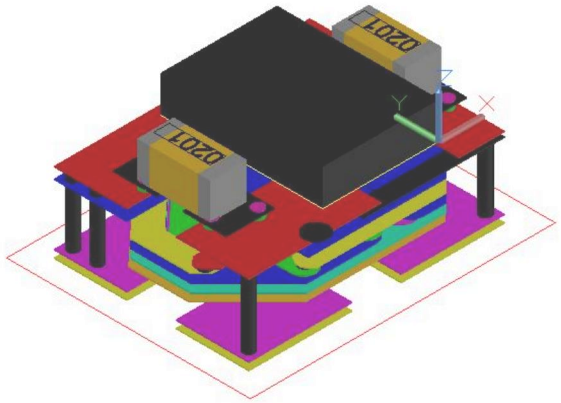
WHY CHOOSE

Thermal expansion coefficient of the ceramic substrate matches that of the IC chip, enhancing bending strength and improving thermal shock resistance

3D Heterogeneous Stacked Ceramic IC Substrates Meets The High Reliability Requirements





20W/cm^3 100W/cm^3 600W/cm^3

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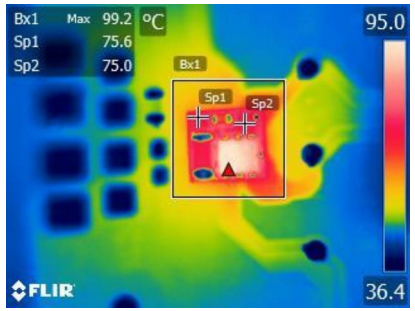
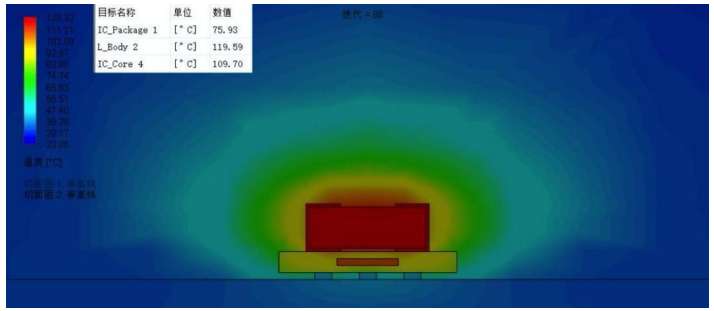
WHY CHOOSE

High Thermal Conductivity of Ceramic Substrate and Thermal Design Meet High Power Requirements

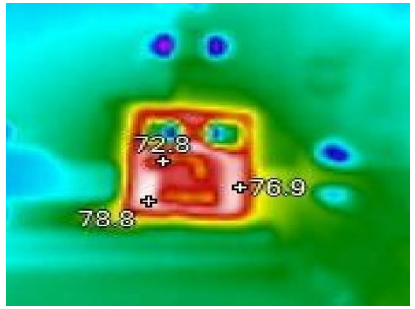
The ceramic substrate can serve as a high specific heat capacity.
The ceramic substrate can prevent heat concentration from forming a local heat source.



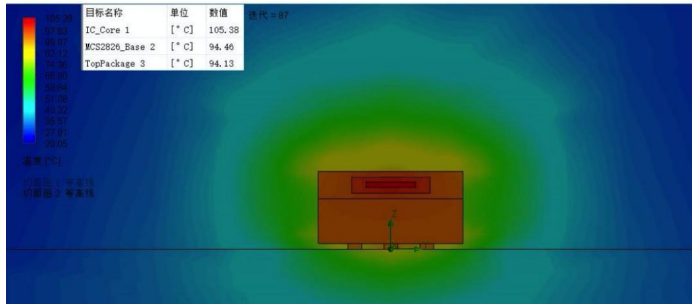
Real thermal infrared images of PCB substrate products



Thermal imaging simulation diagrams



Real thermal infrared images of ceramic substrate products



Thermal imaging simulation diagrams

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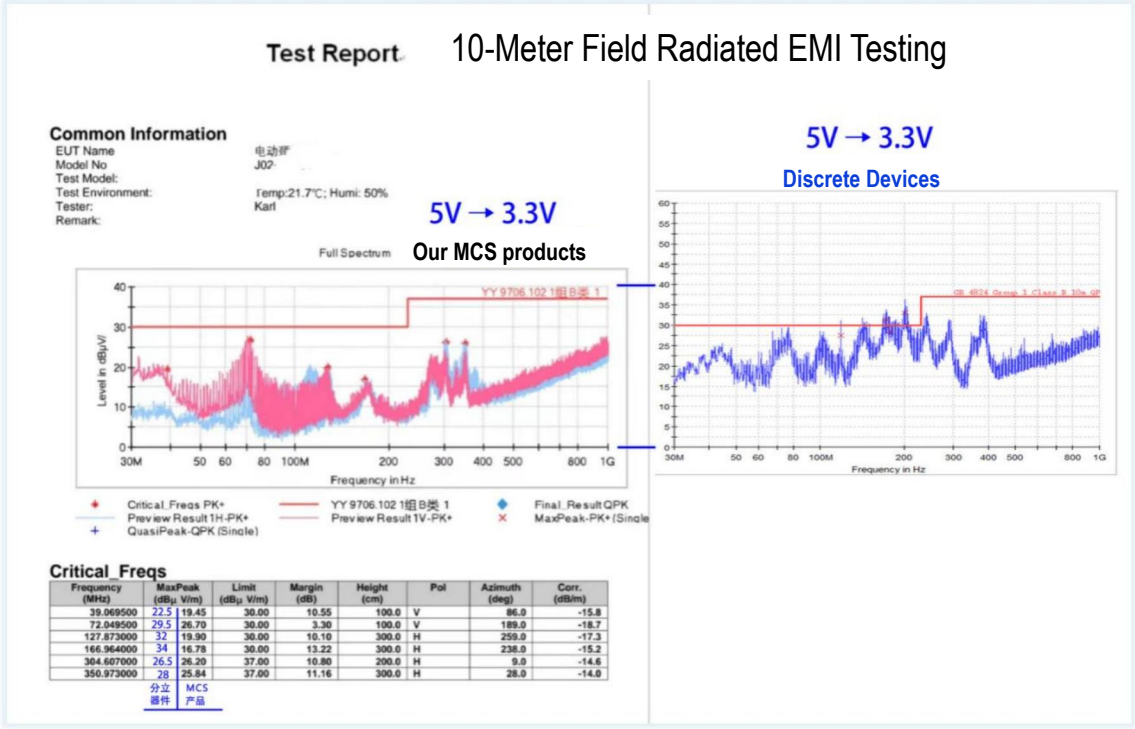
WHY CHOOSE

Shielding Against Electromagnetic Interference Reduces Conducted and Radiated EMI Noise

Circuit and Vin/Vout are fully embedded in the multilayer ferrite ceramic substrate. The magnetic ceramic substrate effectively acts as an inductor bead, providing efficient shielding against EMI noise.



Comparison chart of EMI testings using ceramic substrate DC/DC module and discrete DC/DC module

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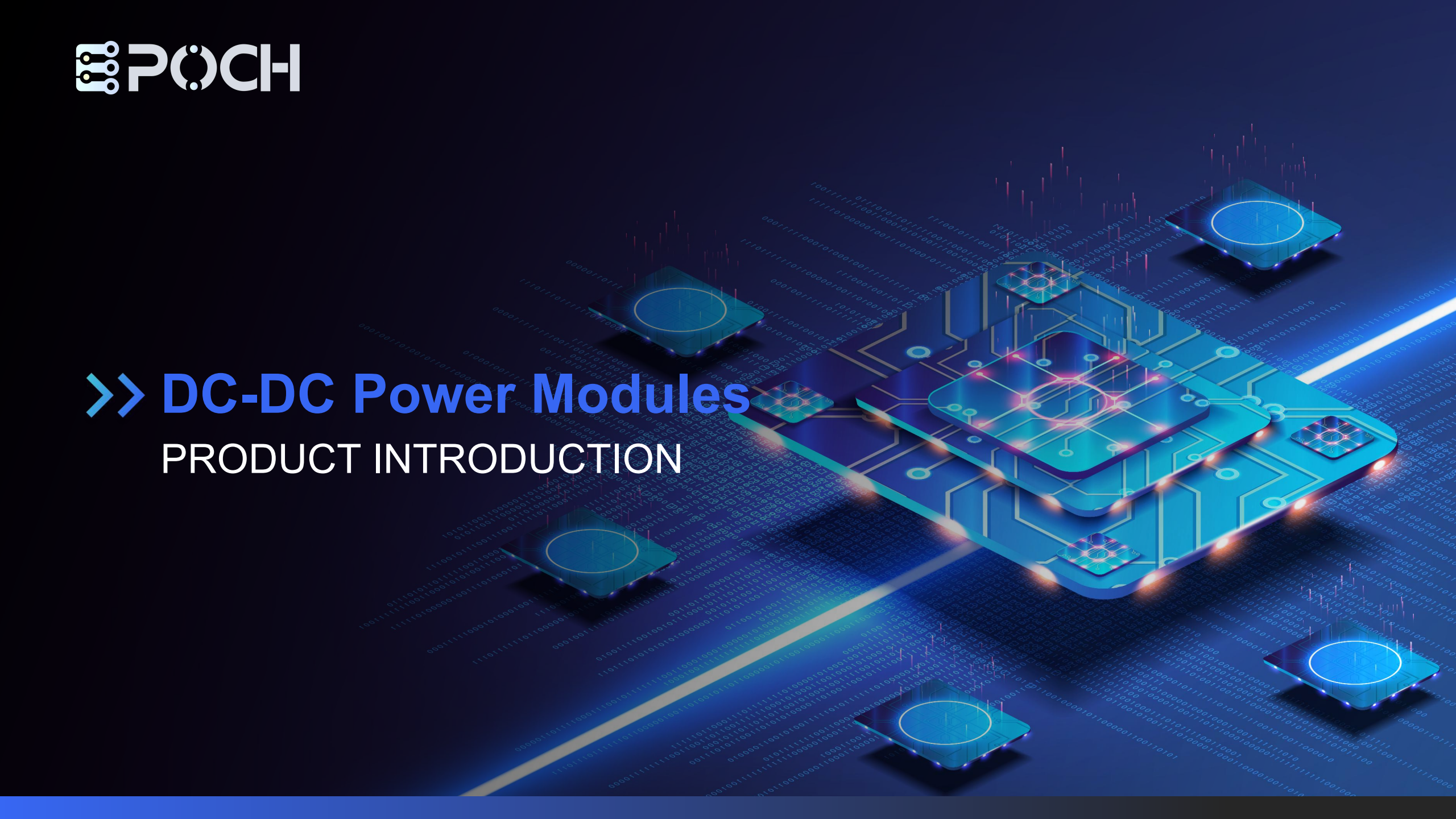
DC-DC Power Modules

PRODUCT INTRODUCTION



Competitive Advantages

V_{in} \ I_{out}	0.3~0.7A	1~1.5A	2A	3A	4~5A	6~8A	25~30A	50A	100A
Wide V_{IN} ≤ 75V					FHT8027 15× 15×4.32mm				
High Voltage (≤45V)	UDM3506 5 ×3.2 ×2mm FHT8029 11.3 ×6.25×4.32mm		FHT8023 11.25×9.0 ×2.95mm		FHT3550 12× 12×4.32mm				
Medium Voltage (<24V)	FHT4663 5.0 ×3.2 ×2.25mm 5.0 ×3.2 ×2.85mm	UDM3610 5 ×3.2 ×2mm	MPPM8070 8.0 ×7.0 ×2.5mm	FHT23030 3.0 ×2.8 ×2.0mm FHT4643 15.0 ×9.0 ×2.8mm FHT4623 6.75×6.75×2.95mm	FHT4644 FHT4644C/D FHT4644H 15.0 ×9.0 ×5.01mm FHT4644L (thin) 15.0 ×9.0 ×2.5mm UDM4624 7.75×7.75×4.0mm	FHT4618 15.0 ×9.0 ×4.32mm UDM3650C Sample 4 x 6 x 2.1mm	FHT4630 16.0 × 16.0 ×4.32mm FHT3695-25 12.0 × 10.0 ×4.32mm	FHT4650 Sample 16.0 × 16.0 ×4.32mm	FHT3695-100 Sample 30.0 × 15.0 ×5.6mm
Low Voltage (<6V)	UDM22006 UDM92403 UDM2520 2.5 ×2.0 × 1.35mm	UDM22010 UDM3810 UDM82821 2.5 ×2.0 × 1.35mm UDM81256 UDM2826 2.8 ×2.6 × 1.35mm		UDM22028 2.5 ×2.0 × 1.35mm	UDM3840 3 x 5 x 1.8mm	FHT3860 4 x 6 x 1.6mm			
Ceramic transformer Sample	V_{in}=28V , boosting up to 1500V , 9 ×9 ×2.7mm								

Multi-channel power supplies suitable for high current applications

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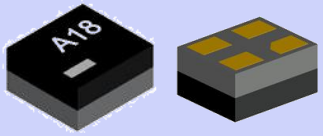
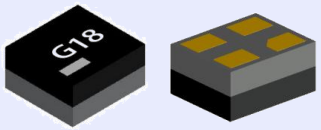
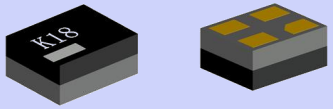
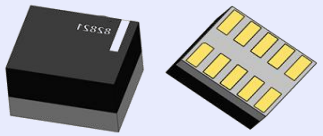
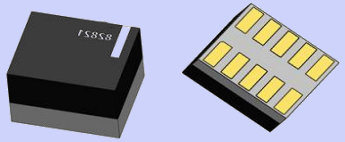
Multilayer Ceramic Substrate with Embedded Components

Images	Part Number	Output Current (A)	Input Voltage (V)	Output Voltage (V)	Dimensions (mm)	Maximum Efficiency	Factory Pack Quantity(PCS)
	UDM2520I	0.6A	2.3~5.5	0.8~3.3	2.5 *2*1.1	94%	3,000
	UDM22006	0.6A	2.3~5.5	1.2~3.3	2.5 *2*1.1	95%	3,000
	UDM22010	1A	2.3~5.5	1.2~3.3	2.5 *2*1.1	95%	3,000
	UDM82821adj	1A	2.5~5.5	0.8~4.0	2.5 *2*1.1	95%	3,000
	UDM82821	1.2A	2.3~5.5	1.2~3.3	2.5 *2*1.1	95%	3,000

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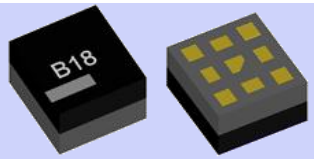
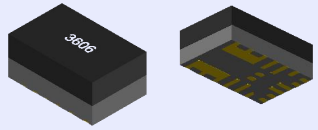
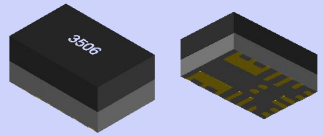
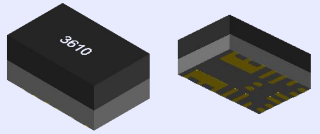
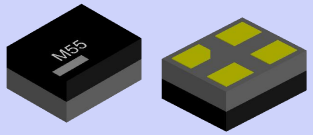
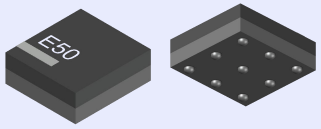
Multilayer Ceramic Substrate with Embedded Components

Images	Part Number	Output Current (A)	Input Voltage (V)	Output Voltage (V)	Dimensions (mm)	Maximum Efficiency	Factory Pack Quantity(PCS)
	UDM2826I	1.5A	2.7~5.5	1.0~3.3	2.8 *2.6*1.1	93%	3,000
	UDM3606	0.6A	4.5~18	0.6~5.5	5*3.2*2.2	95%	3,000
	UDM3506	0.6A	4.5~36	0.8	5 *3.2*2.2	88%	3,000
	UDM3610	1.2A	4.5~18	0.6~5.5	5 *3.2*2.2	95%	3,000
	UDM92403	0.3A	0.7~5.5	1.8~5.5	2.5*2*1.1	93%	3,000
	UDM81256	1A	2.5~5.5	5	2.8*2.6*1.35/1.1	95%	3,000

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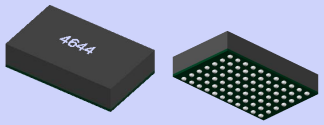
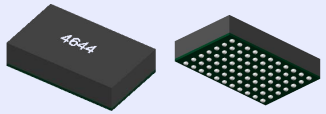
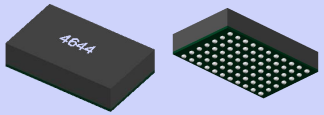
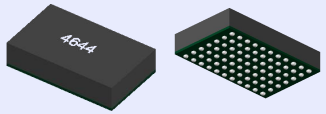
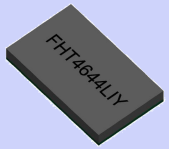
Magnetic Integrated SIP Package

Images	Part Number	Output Current (A)	Input Voltage (V)	Output Voltage (V)	Dimensions (mm)	Maximum Efficiency	Factory Pack Quantity(PCS)
	FHT4644	4A	4.0~15.0	0.8~5.5	9 *15*4.32	92%	500
	FHT4644H	4A	4.0~14.0	0.6~5.5	9 *15*4.32	92%	500
	FHT4644C/D	4A	4.5~14.0	0.6~5.5	9 *15*4.32	92%	500
	FHT4644F	4A	4.5~16.0	0.6~5.5	9 *15*4.32	92%	500
	FHT4644L	4A	4.0~15.0	0.8~5.5	9 *15*4.32	92%	500

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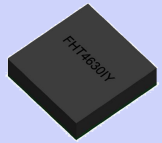
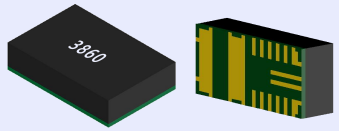
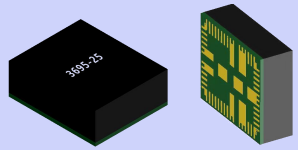
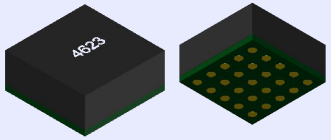
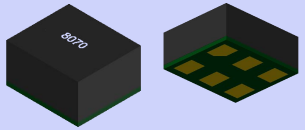
Magnetic Integrated SIP Package

Images	Part Number	Output Current (A)	Input Voltage (V)	Output Voltage (V)	Dimensions (mm)	Maximum Efficiency	Factory Pack Quantity(PCS)
	FHT4630	18A+18A	4.5~15	0.6~1.8	16*16*5.01	94%	500
	FHT3860	6A	2.3~5.5	0.5~3.3	4*6*1.6	94%	500
	FHM3695-25	20A	4.0~16.0	0.6~5.5	10 *12*4.32	95%	500
	FHT4623	3A	4.2~20.0	0.6~5.5	6.75 *6.75*2.95	95%	500
	MPPM8070	2A	4.5~18.0	0.6~15.0	8 *7*4.32/2.5	93%	500

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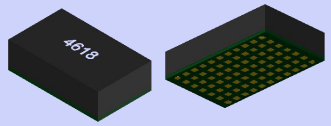
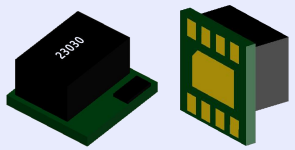
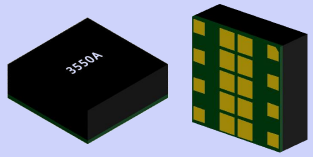
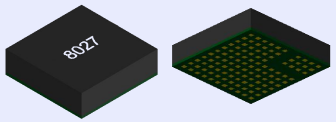
Magnetic Integrated SIP Package

Images	Part Number	Output Current (A)	Input Voltage (V)	Output Voltage (V)	Dimensions (mm)	Maximum Efficiency	Factory Pack Quantity(PCS)
	FHT4618	6A	4.5~24.0	0.6~5.5	15 *9*4.32	95%	500
	FHT23030	3A	4.5~17.0	0.9~6	3*2.8*1.4	94%	500
	FHT3550A	5A	3.5~40.0	1.0~12.0	12*12*4.32	95%	500
	FHT8027C	4A	5.0~60.0	2.5~24.0	15 *15*4.32	95%	500

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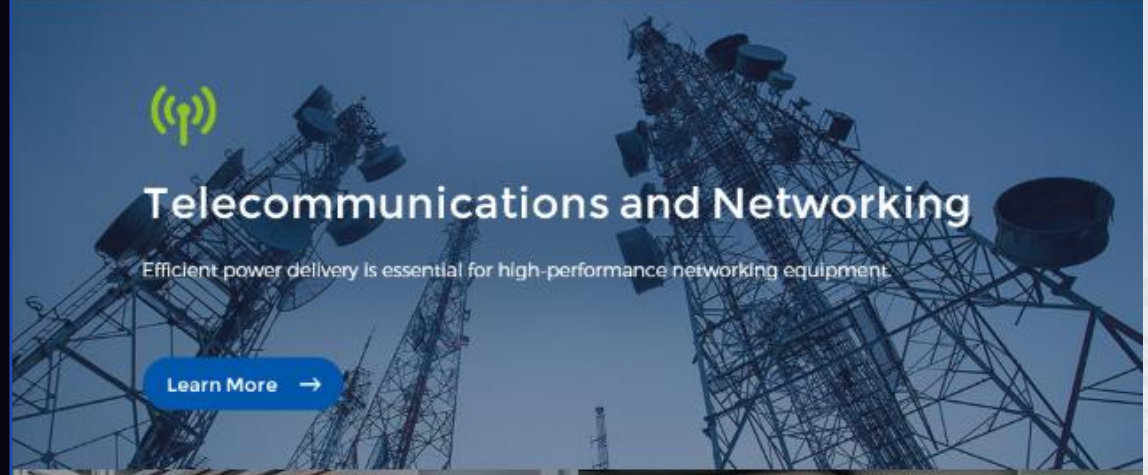
DC-DC Power Modules

PRODUCT APPLICATIONS

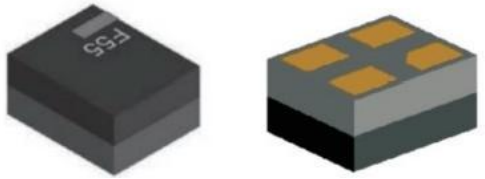


Multilayer Ceramic Substrate with Embedded Components

DC-DC Power Modules

UDM92403

(0.7V to 5.5V) Input, 300mA Output DC-DC Ceramic Substrate Adjustable Boost Module



Main Applications

- Mobile phones, portable devices
- USB, USB-OTG, HDMI applications
- Smart cards, satellite navigation, solid-state drives
- Compact and miniaturized applications

Product Features

- Ceramic Power Module, Saves One Inductor and One Capacitor
- Dimensions: 2.8mm x 2.6mm, thickness 1.35mm or 1.10mm
- 9-pin LGA package
- Efficiency up to 95%
- Shielded structure, low EMI noise
- Input voltage: 2.5V to 5.5V
- Fixed output voltage: 5V
- Maximum load current:
- lout ⩾550mA(Vin⩾2.5V)
- lout ⩾800mA(Vin ⩾3.3V)
- lout ⩾1000mA(Vin ⩾4.0V)
- Automatic PFM/PWM mode switching
- Low ripple voltage PFM mode under light load
- ±1.5% voltage accuracy across the full load current range
- Internal soft start, overcurrent protection, and over-temperature protection

Product Description

- The UDM92403 is a low-power boost DC-DC module suitable for space-constrained or noise-sensitive applications. The device features an inductor-embedded ferrite substrate, which reduces both radiated EMI noise and conducted noise. It uses a plastic integrated package to provide high mounting reliability while achieving an extremely small size (2.5mm × 2.0mm, thickness 1.35mm or 1.10mm).

- By adding input and output capacitors, the device can be easily used. The device offers low noise, easy usage, and reliable performance. The device smoothly switches between PFM (Pulse Frequency Modulation) and PWM (Pulse Width Modulation) modes based on the load current. Under light load conditions, it automatically switches to PFM mode to ensure low consumption. Under heavy load conditions, it automatically switches to PWM mode to ensure low ripple. The device maintains excellent output voltage accuracy even in PFM mode, keeping the output voltage accuracy within ±2% over the entire load current range.

- When Vin>Vout, the switch duty cycle is 100%, entering bypass mode.

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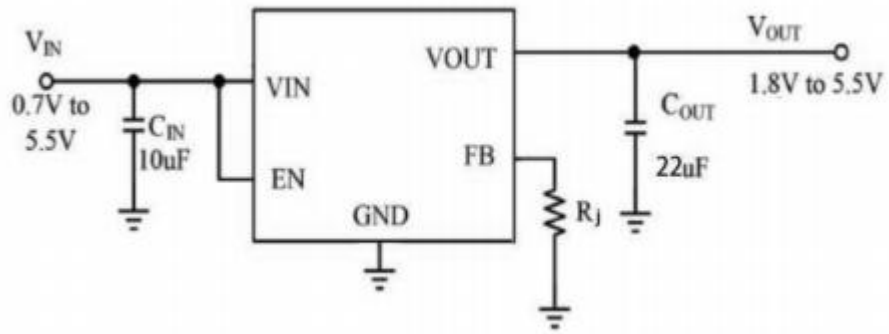
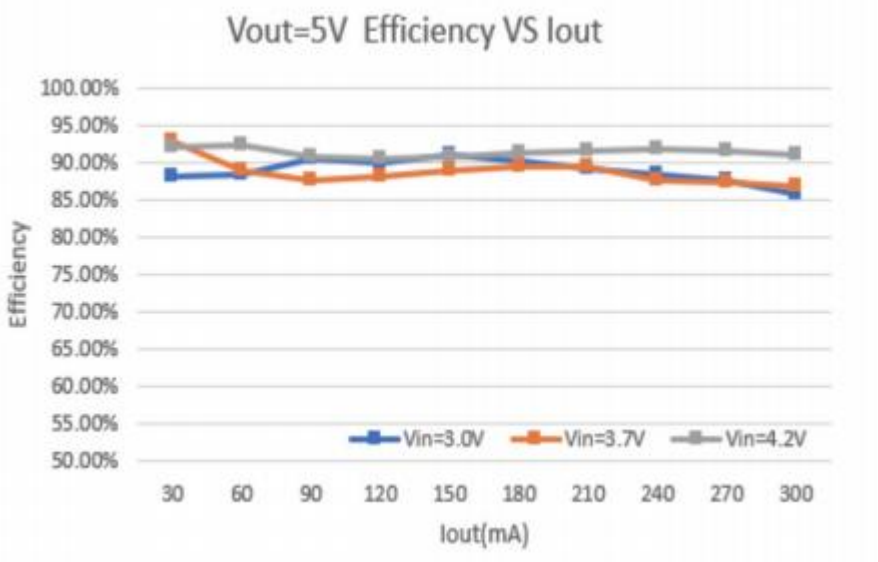
UDM92403

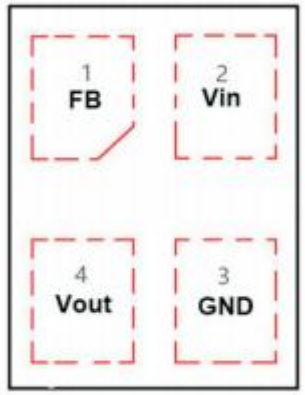
Typical Applications





Note: Recommended Cin : 10μF/6.3V,
Recommended Cout : 22μF/6.3V;
Add more capacitance can decrease the ripple.

Pin Configuration



Top View (Scenograph)

Pins	Symbols	descriptions
1	FB	Output voltage adjustment pin. Connect a voltage-setting resistor with a precision of 1% or better to GND.
2	Vin	Positive input voltage. Provides power input to the internal power circuits and control circuits. The operating voltage range is 0.7V to 5.5V. The capacitor should be placed as close as possible to the module's Vin pin, and wide traces and multiple vias should be used wherever possible.
3	GND	Ground Pin
4	Vout	Regulated output pin. Connect the output load between this pin and GND.

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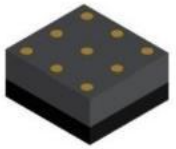
UDM81256

(2.5V~5.5V) Input, 1A Output,DC-DC Boost Module, Fixed Output Voltage: 5V



Main Applications

- Mobile phones, portable devices
- USB, USB-OTG, HDMI applications
- Smart cards, satellite navigation, solid-state drives
- Compact and miniaturized applications

Product Features

- Ceramic Power Module, Saves One Inductor and One Capacitor
- Dimensions: 2.8mm x 2.6mm, thickness 1.35mm or 1.10mm
- 9-pin LGA package
- Efficiency up to 95%
- Shielded structure, low EMI noise
- Input voltage: 2.5V to 5.5V
- Fixed output voltage: 5V
- Maximum load current:
- lout ⩾550mA(Vin⩾2.5V)
- lout ⩾800mA(Vin ⩾3.3V)
- lout ⩾1000mA(Vin ⩾4.0V)
- Automatic PFM/PWM mode switching
- Low ripple voltage PFM mode under light load
- ±1.5% voltage accuracy across the full load current range
- Internal soft start, overcurrent protection, and over-temperature protection

Product Description

- The UDM81256 is a low-power boost DC-DC module suitable for space-constrained or noise-sensitive applications. The device features an inductor-embedded ferrite substrate, which reduces both radiated EMI noise and conducted noise. It uses a plastic integrated package to enhance mounting reliability.

- By adding input and output capacitors, the device can be easily used. It offers low noise, ease of use, and reliable performance. The device smoothly switches between PFM (Pulse Frequency Modulation) and PWM (Pulse Width Modulation) modes based on the load current. Under light load conditions, it automatically switches to PFM mode to ensure low consumption. Under heavy load conditions, it automatically switches to PWM mode to ensure low ripple. The device maintains excellent output voltage accuracy even in PFM mode, keeping the output voltage accuracy within ±1.5% over the entire load current range.

- When Vin>Vout, the switch duty cycle is 100%, entering bypass mode.

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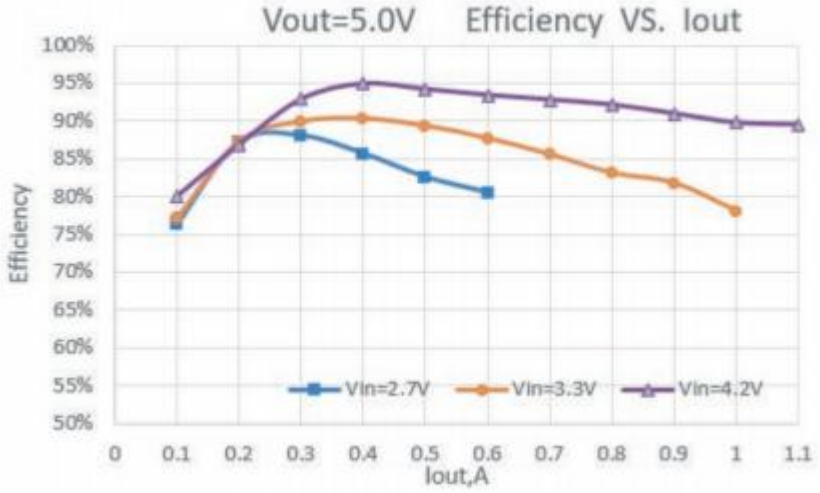
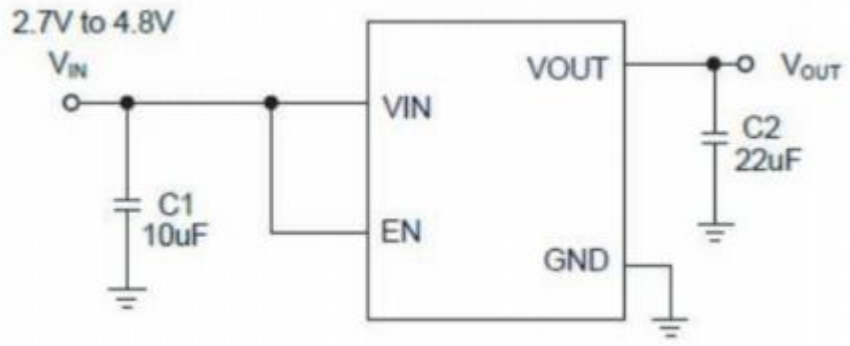
UDM81256

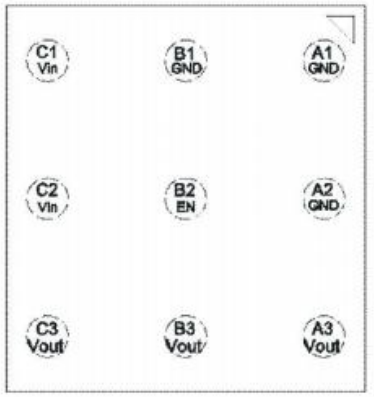
Typical Applications





Note: Recommended Cin (C1): 10μF/6.3V,
Recommended Cout (C2): 22μF/6.3V; Increasing Add more capacitance can decrease the ripple.

Pin Configuration



Top View

Pins	Symbols	descriptions
C1、C2	V_{in}	The V_{in} pin provides current to the internal regulator of the module.
B2	EN	This is the on/off control pin of the device. Connecting this pin to GND keeps the device in the off mode. Pulling this pin to Vin enables the device with a soft start function. This pin must not be left floating. EN = H: Device On, EN = L: Device Off.
A3、B3、C3	V_{out}	Regulated output pin. Connect the output load between this pin and GND.
A1、A2、B1	GND	Ground Pin

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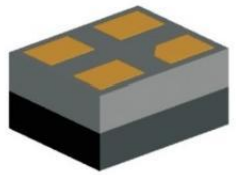
UDM22006

(2.3V to 5.5V) Input, 0.6A Output DC-DC Buck Module, Efficiency up to 95%



Main Applications

- Industrial control
- Medical imaging equipment
- Telecommunications and network applications
- Replacement for linear regulators (LDO)
- Miniaturized applications
- Smart cards, satellite navigation, solid-state drives

Product Features

- Ferrite ceramic substrate with integrated power inductor, ultra-small footprint (2.5mm × 2.0mm, thickness 1.10mm or 1.35mm)
- Shielded structure, low EMI noise
- Integrated capacitors in a plastic package, high surface mount reliability
- Synchronous rectification technology for high efficiency
- Automatic PFM/PWM mode switching
- Low ripple voltage PFM mode under light load
- ±2% voltage accuracy across the full load current range
- Wide input voltage range: 2.3V to 5.5V
- Maximum load current: 600mA
- Fixed output voltage: 1.2V to 3.3V (factory-set)
- Internal soft start, overcurrent protection

Product Description

- The UDM22006 is a low-power buck DC-DC converter suitable for space-constrained or noise-sensitive applications. The device features an inductor-embedded ferrite substrate, which reduces both radiated EMI noise and conducted noise. It uses a plastic integrated package to enhance mounting reliability.

- By adding input and output capacitors, it can be used as a replacement for linear regulators (LDOs). Its low noise and ease of use ensure reliable power quality. The device smoothly switches between PFM (Pulse Frequency Modulation) and PWM (Pulse Width Modulation) modes based on the load current. Under light load conditions, it automatically switches to PFM mode to extend battery life. Under heavy load conditions, it automatically switches to PWM mode to ensure low ripple and high efficiency. The device maintains excellent output voltage accuracy even in PFM mode, keeping the output voltage accuracy within ±2% over the entire load current range (0 to 600mA).

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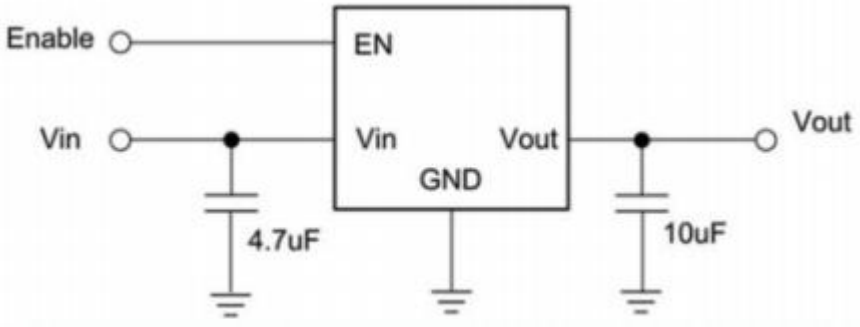
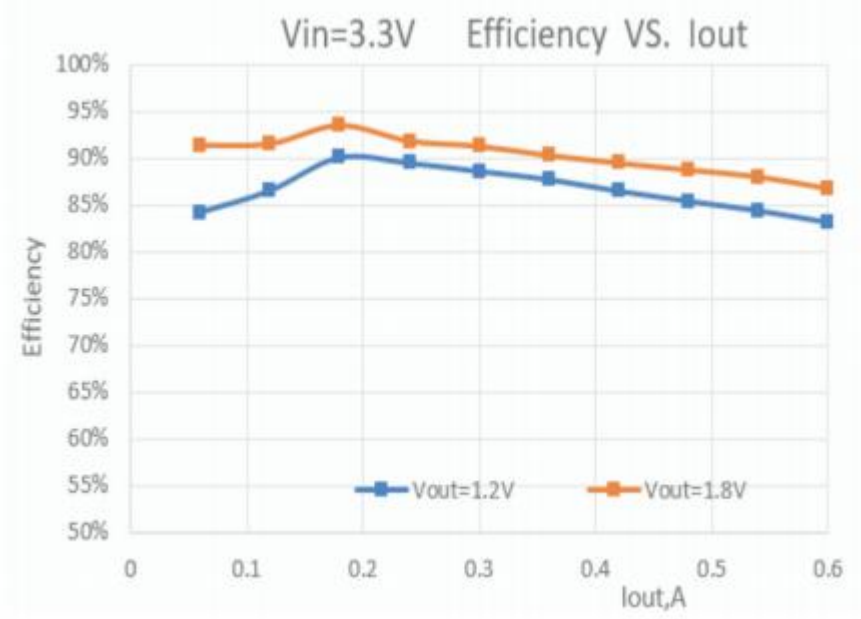
UDM22006

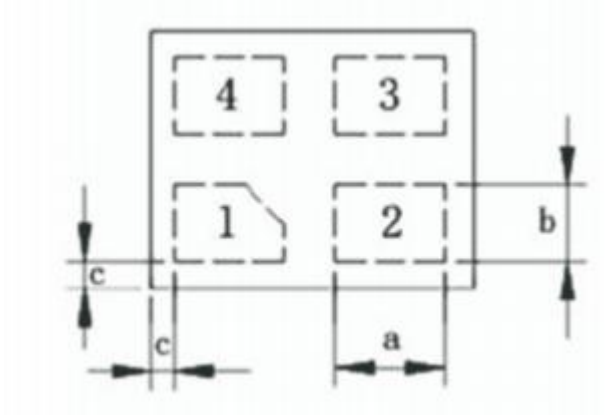
Typical Applications





Note: Recommended Cin: 4.7μF/6.3V,
Recommended Cout: 10μF/6.3V;
Add more capacitance can decrease the ripple.

Pin Configuration



Top View

Pins	Symbols	descriptions
1	V_{in}	The Vin pin provides current to the internal regulator of the module.
2	EN	This is the on/off control pin of the device. Connecting this pin to GND keeps the device in the off mode. Pulling this pin to Vin enables the device with a soft start function. This pin must not be left floating. If this pin remains open, the device may turn off at 100mA output. EN = H: Device On, EN = L: Device Off.
3	V_{out}	Regulated output pin. Connect the output load between this pin and GND.
4	GND	Ground Pin

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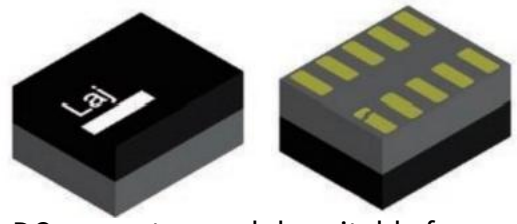
UDM82821adj

（2.5V~5.5V） Input, 1A Output, DC-DC Ceramic Substrate Adjustable Buck Module



Main Applications

- Digital cameras
- Telecommunications and network applications
- Optical communications
- Replacement for linear regulators (LDO)
- Miniaturized applications
- Smart cards, satellite navigation, solid-state drives

Product Features

- Ferrite ceramic substrate with integrated power inductor, low EMI noise
- Ultra-small footprint (2.5mm × 2.0mm, thickness 1.10mm or 1.35mm)
- Integrated capacitors in a plastic package, high surface mount reliability
- Synchronous rectification technology for high efficiency, up to 95%
- Automatic PFM/PWM mode switching
- ±2% voltage accuracy across the full load current range
- Wide input voltage range: 2.5V to 5.5V
- Maximum load current:
- Vin=2.5V, lout≥0.7A;
- Vin=3.3V, lout≥0.9A;
- Vin=5V, lout ≥1A
- Adjustable output voltage: 0.8V to 4.0V

Product Description

- The UDM82821adj is a low-power buck DC-DC converter module suitable for space-constrained and noise-sensitive applications. The device features an inductor-embedded ferrite substrate, which effectively reduces both radiated EMI noise and conducted noise. It uses an integrated plastic package to enhance mounting reliability.

- By adding input and output capacitors, it can be used as a replacement for linear regulators (LDOs). Its low noise and ease of use ensure reliable power quality. The device smoothly switches between PFM (Pulse Frequency Modulation) and PWM (Pulse Width Modulation) modes based on the load current. Under light load conditions, it automatically switches to PFM mode to extend battery life. Under heavy load conditions, it automatically switches to PWM mode to ensure low ripple and high efficiency. The device maintains excellent output voltage accuracy even in PFM mode, keeping the output voltage accuracy within ±2% over the entire load current range.

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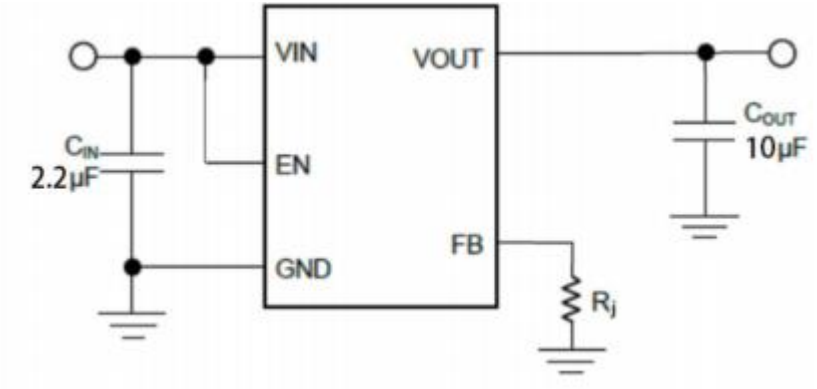
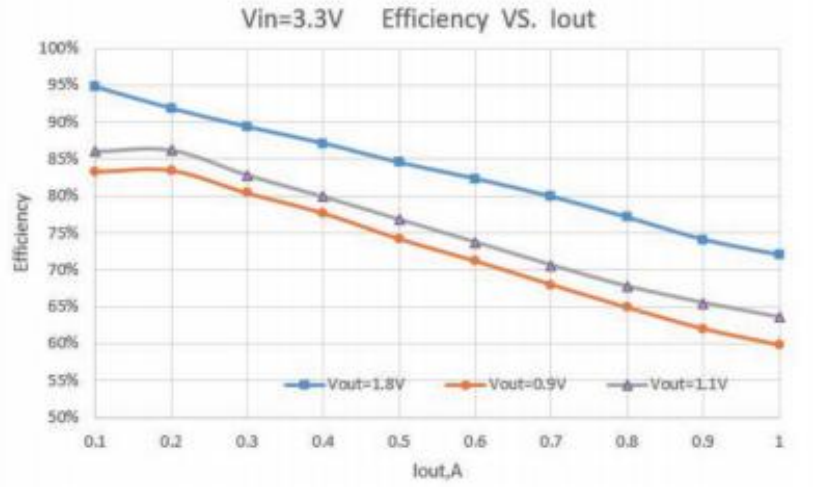
UDM82821adj

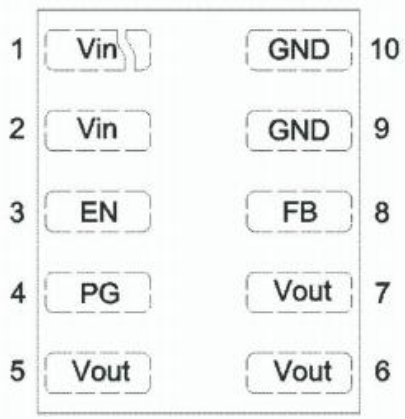
Typical Applications





Note: Recommended Cin : 2.2uF/6.3V,
Recommended Cout : 10uF/6.3V;
Add more capacitance can decrease the ripple.

Pin Configuration



Top View (Scenograph)

Pins	Symbols	descriptions
1，2	V_{IN}	The Vin pin provides current to the internal regulator of the module.
3	EN	This is the on/off control pin of the device. Connecting this pin to GND keeps the device in the off mode. Pulling this pin to Vin enables the device with a soft start function. This pin must not be left floating. EN = H: Device On, EN = L: Device Off.
4	NC	No Electrical Connection
5,6,7	V_{OUT}	Regulated output pin. Connect the output load between this pin and GND.
8	FB	Voltage Feedback Pin
9,10	GND	Ground Pin

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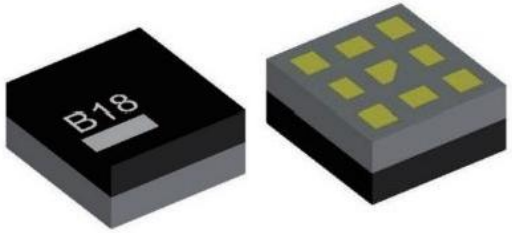
UDM2826

(2.5V to 5.5V) Input, 1.5A Output DC-DC Ceramic Substrate Adjustable Buck Module



Main Applications

- SSD hard drives
- Telecommunications and network applications, optical communications
- Miniaturized applications
- Smart cards, satellite navigation, solid-state drives

Product Features

- Ferrite ceramic substrate with integrated power inductor and capacitors in a plastic package, low EMI noise
- Ultra-small footprint (2.8mm × 2.6mm × 1.35mm)
- LGA package
- Synchronous rectification technology for high efficiency
- Control mode selection: Automatic PFM/PWM mode switching or forced PWM mode
- Low ripple voltage PFM mode under light load
- ±2.5% voltage accuracy across the full load current range
- Wide input voltage range: 2.7V to 5.5V
- Maximum load current: 1.5A (800mA for output voltages of 2.5V or 3.3V)
- Fixed output voltage: 1.0V to 3.3V (factory-set)
- Internal soft start, overcurrent protection

Product Description

- The UDM2826 series are low-power buck DC-DC converters suitable for space-constrained or noise-sensitive applications. The devices feature an inductor-embedded ferrite substrate, which reduces both radiated EMI noise and conducted noise. It uses a plastic integrated package to enhance mounting reliability.
- By adding an output capacitor, it can be used as a replacement for linear regulators (LDOs). Its low noise and ease of use ensure reliable power quality.
- The devices are designed to automatically switch between PFM (Pulse Frequency Modulation) and PWM (Pulse Width Modulation) modes. In light load conditions, it operates in PFM mode to extend battery life. Under heavy load conditions, it uses synchronous rectification technology and automatically switch to PWM mode to maintain high efficiency.
- If set to forced PWM mode (MODE=H), the devices provide excellent output voltage accuracy across the entire load range. It maintains ±2.5% voltage accuracy over the entire current range (0 to 1.5A).
- When used as a reference voltage source, it is recommended to set the device to forced PWM mode (MODE=H). This can be done by directly connecting the MODE pin to Vin.

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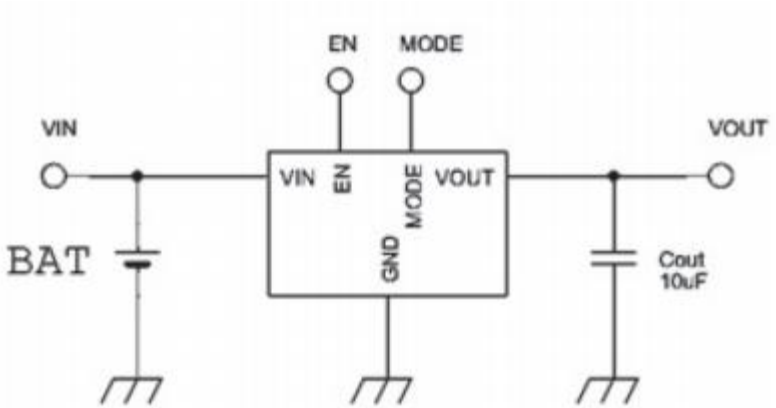
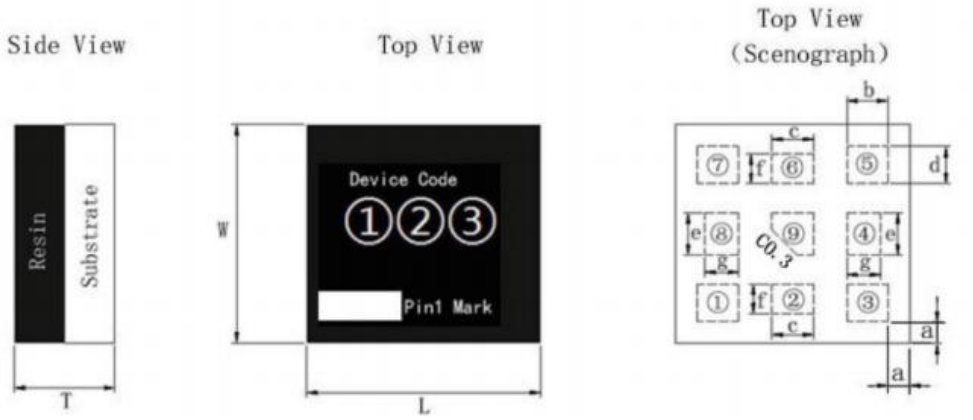
UDM2826

Typical Applications



Note: Cm 4.7μF/6.3V, Cout 10μF/6.3V.
Add more capacitance can decrease the ripple.

Pin Configuration



Pins	Symbols	descriptions
1	MODE	Mode Selection Pin (MODE) The MODE pin must not be left floating. MODE=H: Low-noise mode, forces the device to operate in PWM mode. MODE=L: Automatic switching mode, the device operates in PFM mode at light loads and switches to PWM mode at heavy loads.
2,3	V_{out}	Regulated Output Pin (V_{out}) Connect the output load between this pin and GND.
4,8,9	GND	Ground Pin (GND)
5,6	V_{in}	The V_{in} pin provides current to the internal regulator of the UDM2826I.
7	EN	This is the on/off control pin for the device. Connecting the pin to GND: Keeps the device in the off mode. Pulling the pin to VIN: Enables the device with soft-start functionality. Do Not Leave Floating: The EN pin must not be left floating. If the pin is left open, the device may turn off at an output current of 100mA. Control States: EN = H: Device is enabled (on). EN = L: Device is disabled (off).

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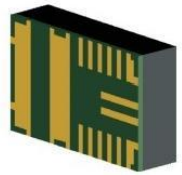
Magnetic Integrated SIP Package

DC-DC Power Modules

FHT3860

(2.3V to 5.5V) Input, 6A Output DC-DC Integrated Molded Adjustable Buck Module



Main Applications

- Optical modules
- Telecommunications and network systems
- Industrial equipment
- Embedded power supplies
- Smart cards, satellite navigation, solid-state drives

Product Features

- 6A continuous output current
- Input voltage range: 2.3V to 5.5V
- Output voltage: 0.5V to 3.3V
- Switching frequency: 3MHz
- Light load PFM mode
- Power Good (PG) output indication
- Internal fixed soft-start time
- Small LGA package (4mm × 6mm × 1.6mm)

Product Description

- The FHT3860 is a high-frequency, high-efficiency DC-DC buck converter that provides a complete power solution, simplifying design with minimal external components. It can achieve an input voltage range of 2.3V to 5.5V, a rated output current of 6A, and adjustable output voltage, offering excellent load regulation and line regulation.

- The FHT3860 features comprehensive protection characteristics, including overcurrent protection (OCP), input undervoltage lockout protection (UVLO), and overtemperature protection (OTP).

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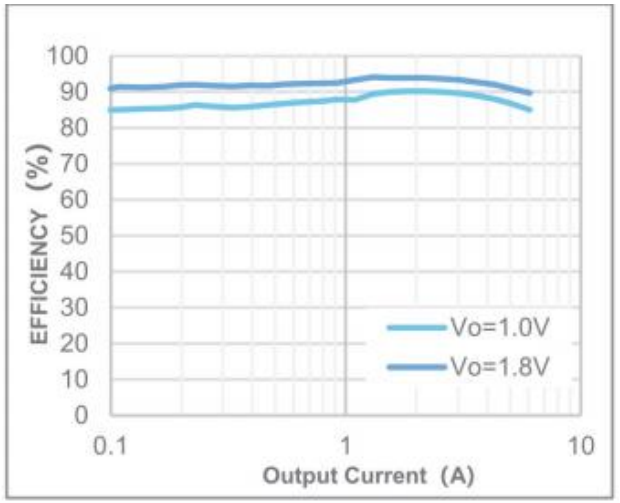
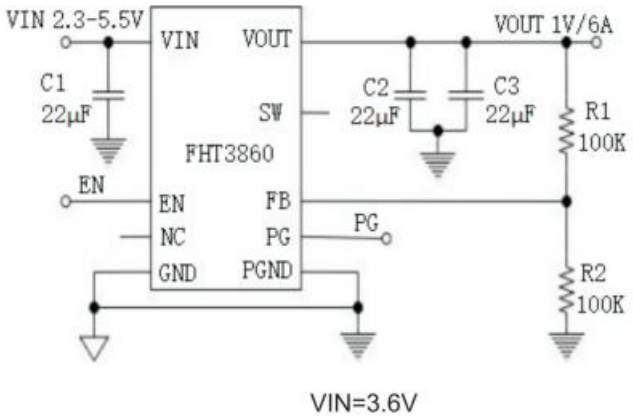
FHT3860

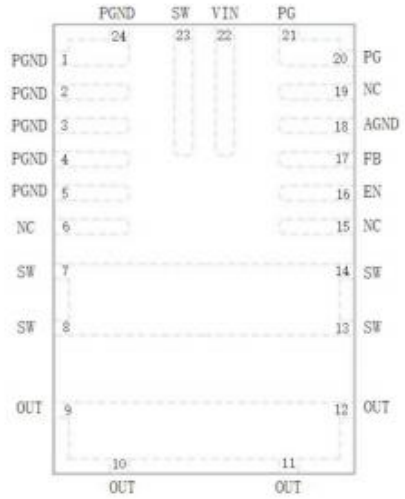
Typical Applications





VIN=3.6V

Pin Configuration



Pin	Symbol	Description
16	EN	**Enable pin,** EN connects high to turn on the module and low to turn off the module. When left open, this pin has an internal 2MΩ resistor connected to ground and the module is turned off.
20,21	PG	**Power Supply Normal Output Indicator Pin.**
17	FB	**Voltage feedback pin.** This pin connects to an external divider resistor to regulate the output voltage.
9,10,11,12	VOUT	**Output voltage pin.**
18	AGND	**Signal ground.** This pin is not internally connected to system ground; ensure that AGND is connected to system ground during PCB layout.
1,2,3,4,5,24	PGND	**System ground.** This pin is the reference ground for regulating the output voltage.
7,8,13,14,23	SW	**Switch output pin.** Connect using wide PCB traces.
22	VIN	**Voltage input pin.** Connect VIN to the input power supply to power the module.
6,15,19	NC	Suspended.

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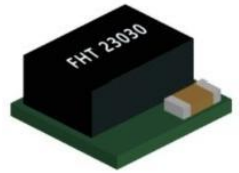
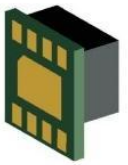
FHT23030

(4.5V to 17V) Input, 3A Output DC-DC Integrated Molded Adjustable Buck Module





Main Applications

- Industrial equipment
- Telecommunications and network systems
- Smart cards, satellite navigation, solid-state drives

Product Features

- 3A continuous output current
- Input voltage range: 4.5V to 17V
- Output voltage: 0.9V to 6V
- Constant On-Time (CoT) control topology
- 40μA quiescent operating current
- Power-saving mode for light load efficiency
- Power Good (PG) output indication
- Programmable soft start
- Small LGA package (3mm × 2.8mm × 1.4mm)

Product Description

- The FHT23030 is a non-isolated DC-DC power module that provides a complete power solution, simplifying design with minimal external components. It can achieve an input voltage range of 4.5V to 17V, a rated output current of 3A, and adjustable output voltage, offering excellent load regulation and line regulation.

- To maximize efficiency, the FHT23030 operates at a nominal switching frequency of 2MHz in PFM mode and automatically enters power-saving mode under light load conditions. In power-saving mode, the typical quiescent operating current of the module is 40 μA.

- The FHT23030 features comprehensive protection characteristics, including overcurrent protection (OCP), short-circuit protection (SCP), input undervoltage lockout protection (UVLO), and overtemperature protection (OTP).

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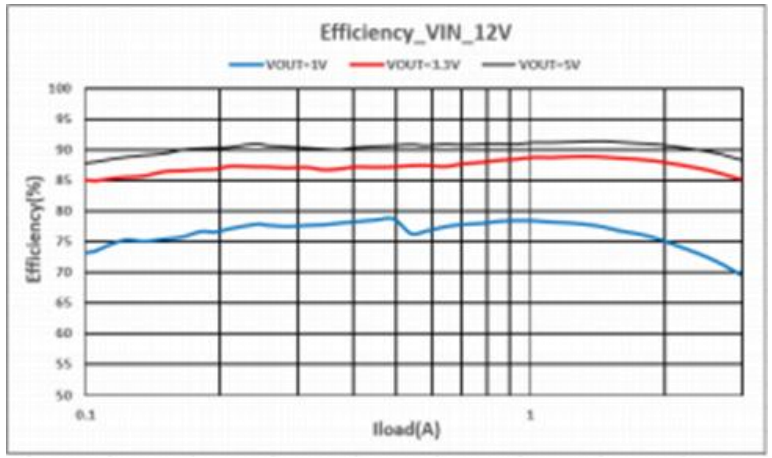
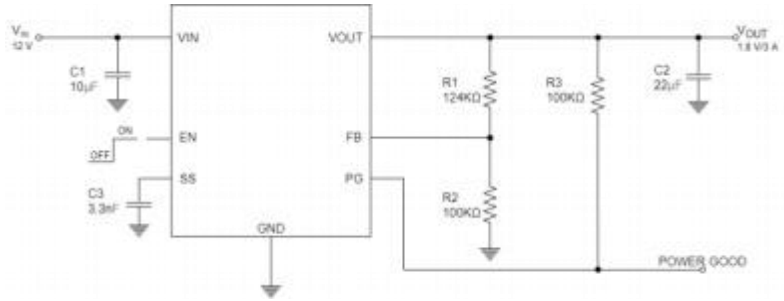
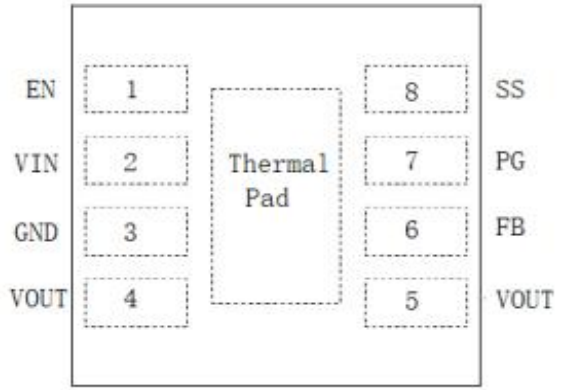
FHT23030

Typical Applications





Pin Configuration



Pin	Symbol	Description
1	EN	**Enable Pin:** Connecting EN to high level turns on the module, while connecting EN to low level turns off the module. When the module is off, this pin has an internal 400KΩ pull-down resistor.
2	VIN	**Voltage Input Pin:** Connect VIN to the input power supply to power the module.
3	GND	**Module Ground.**
4，5	VOUT	**Output Voltage Pin**
6	FB	**Voltage Feedback Pin:** This pin connects to an external voltage divider to adjust the output voltage.
7	PG	**Power Good Output Indicator Pin:** This pin should be connected to a pull-up resistor to any voltage lower than 6V. If not used, leave it floating.
8	SS	**Soft-Start Pin:** Connect an external capacitor to ground on this pin to set the rise time of the internal reference voltage.
	Thermal Pad	**Exposed Heat Sink Pad:** Must be connected to GND. Soldering is required to improve thermal dissipation and mechanical reliability.

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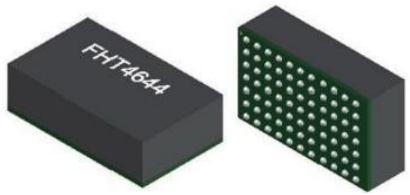
FHT4644/4644L

4-Channel DC-DC, 4A Output per Channel, 4-Channel Parallel 16A, SIP Package Power Module



Main Applications

- Multi-Rail Point-of-Load Regulation
- CPU and GPU power supply
- DSP and FPGA power supply for ASIC chips
- Smart cards, satellite navigation, solid-state drives

Product Features

- Each channel provides 4A full-load output current
- Input voltage range: 4.0V to 14V
- Output voltage: 0.8V to 5.5V
- Switching frequency: Automatically adjusts based on input and output
- Efficiency up to 92%
- Internal 1ms soft start (optional external 1ms available)
- ±2% total output voltage regulation
- Overcurrent protection, overtemperature protection, overvoltage protection, UVLO
- Compact and flat dimensions:
- LGA package (9mm × 15mm × 4.32mm)
- BGA package (9mm × 15mm × 5.01mm)
- Ultra-thin dimensions: Less than half the thickness of conventional sizes
- LGA package (9mm × 15mm × 1.90mm)
- BGA package (9mm × 15mm × 2.50mm)

Product Description

- The FHT4644 is a non-isolated buck-type integrated molded point-of-load power module suitable for embedded high-current applications. Its compact size of 9mm × 15mm × 4.32mm allows it to be placed directly next to FPGAs or CPUs, making it ideal for low-output-voltage, multi-rail applications.
- The small LGA and BGA packages integrate the IC, inductor, and associated components. Only a few external resistors and ceramic capacitors are required for voltage adjustment and input/output filtering, allowing for rapid design of multi-rail power systems, simplifying system design, and maximizing PCB space savings.
- Based on a synchronous rectified Buck topology, the FHT4644 can deliver up to 4A per channel with high power conversion efficiency. It can convert input voltages from 4.0V to 14V to output voltages ranging from 0.8V to 5.5V. The module provides four channels with ON/OFF control, four Power Good signals, and comprehensive protection features including overcurrent protection (OCP), overvoltage protection (OVP), undervoltage protection (UVP), and overtemperature protection (OTP).
- The four output channels of the FHT4644 can be paralleled, and the enable voltage can be connected to the input voltage.

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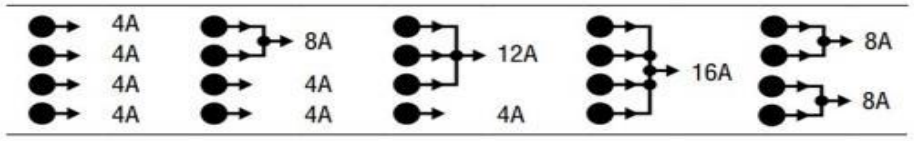
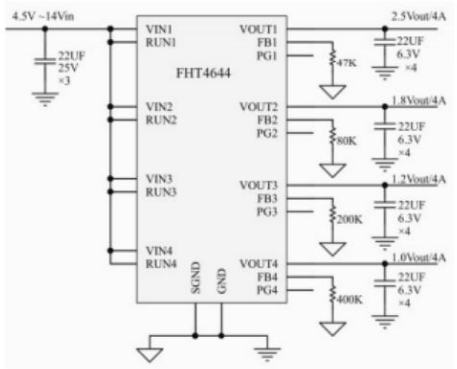
FHT4644/4644L

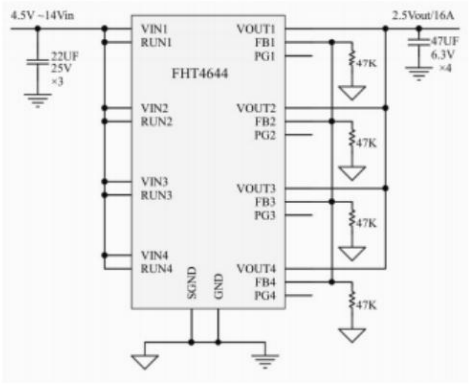
Typical Applications



Quad Output Application Circuit

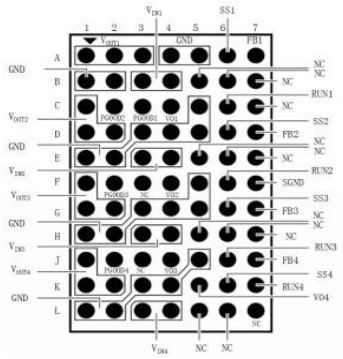


Non-parallel applications



Parallel

Pin Configuration



Pin	Description
V_{OUT1} (A1,A2,A3), V_{OUT2} (C1,D1,D2), V_{OUT3} (F1,G1,G2), V_{OUT4} (J1,K1,K2),	Power Module Quad Output Pins
V_{IN1} (B3,B4),V_{IN2} (E3,E4),V_{IN3} (H3,H4),V_{IN4} (L3,L4)	Power Module Quad Input Pins
GND (A4,A5, B1,B2, C5, D3,D4,D5, E1,E2, F5, G3,G4,G5,) h1, h2, j5, k3, k4, l1, l2)	ground pin
fb1 (a7), fb2 (d7), fb3 (g7), fb4 (j7)	Four output voltage adjustment pins to which 0.5% accuracy regulator resistors can be connected to GND.
run1 (c6), run2 (f6), run3 (j6), run4 (k7)	Four-way enable pin, can be directly connected to the input voltage, can also be connected to an external power supply to control the power module, the minimum enable starting voltage of 1.1V, when the enable voltage is lower than 0.95V, the power supply shutdown. It is recommended that this pin should not be left idle when the enable voltage is greater than 1.2V.
pgood1 (c3), pgood2 (c2), pgood3 (f2), pgood4 (j2)	Fault indication pin, PG=high means VOUT is within the voltage range, PG=low means VOUT is below the specified value. This PGOOD pin can be connected to a 100K resistor to the VO pin, can also be connected to other voltage supply to the PGOOD, when the PGOOD is set to low means that the power module is abnormal (the abnormalities include UV, OV, OC, OT, etc.) If you do not need to indicate the function of the fault, do not add this resistor, PGOOD can be left empty.
VO1 (C4), VO2 (F4), VO3 (J4), VO4 (K5)	VO can be used as PG power supply pin, four sets of VO have been connected to four outputs inside the power module respectively, i.e. VO1=VOUT1,VO2=VOUT2, VO3=VOUT3, VO4=VOUT4.
MODE1(B6), MODE2(E6), MODE3(H6), MODE4(L6)	The FHT4644L is a vacant pin with no electrical function, and can be connected to any pin. (The FHT4644L's operating frequency and mode can be automatically adjusted to a typical operating frequency of 1MHz.)
SGND (F7)	For signal ground, it is recommended that GND (power ground) and SGND be wired separately and eventually connected with a 0 ohm resistor.
SS1 (A6), SS2 (D6), SS3 (G6), SS4 (K6)	External soft start pin, external 3.3nF ceramic capacitor can be connected to signal ground, if there is no need to increase the external soft start function, this capacitor can not be added, SS pin is empty.
NC (E7, H7, L7, C7, L5, H5, E5, B5, J3, F3)	Empty pin, no electrical function, can be connected to any pin.

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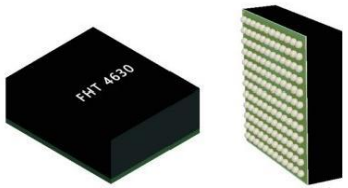
FHT4630

Dual 18A or Single 36A DC-DC Module Regulator



Main Applications

- Telecommunications and network equipment
- Industrial equipment
- Servers and computing
- FPGA/ASIC for AI and data mining
- Smart cards, satellite navigation, solid-state drives

Product Features

- Two-channel 18A or single-channel 36A output
- Wide input voltage range: 4.5V to 15V
- Adjustable output voltage: 0.6V to 1.8V
- Differential remote sensing amplifier
- Adjustable switching frequency
- External frequency synchronization capability
- Up to 8-phase parallel operation, with a maximum current of 144A
- Dimensions: 16mm × 16mm × 4.32mm (LGA) or 16mm × 16mm × 5.01mm (BGA)

Product Description

- The FHT4630 is a dual-channel 18A or single-channel 36A output switching-mode buck DC-DC regulator module. It integrates a power controller, power MOSFETs, inductors, and other peripheral components. The FHT4630 has an input voltage range of 4.5V to 15V and supports two independent adjustable outputs of 0.6V to 1.8V, which can be set by adjusting an external resistor. Alternatively, the two channels can be paralleled for a single output.

- Based on a high-efficiency design, the FHT4630 requires only a minimal number of external input and output capacitors to provide up to 18A of output current per channel. The FHT4630 offers a complete power solution with excellent load regulation and line regulation. It operates efficiently over a wide load range and can be paralleled to provide higher load currents.

- The FHT4630 includes comprehensive protection features such as overcurrent protection (OCP), overvoltage protection (OVP), undervoltage protection (UVP), and overtemperature protection (OTP). It minimizes the use of external components and comes in a compact form factor of 16mm × 16mm × 4.32mm (LGA) or 16mm × 16mm × 5.01mm (BGA).

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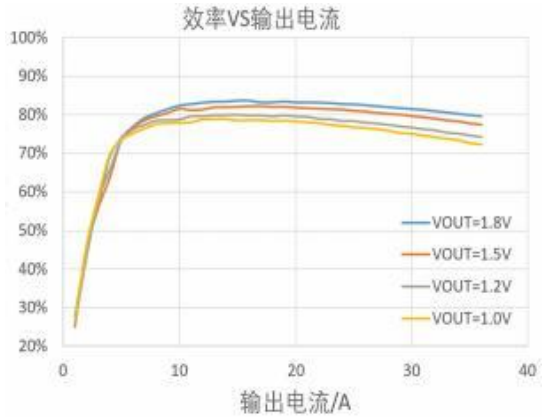
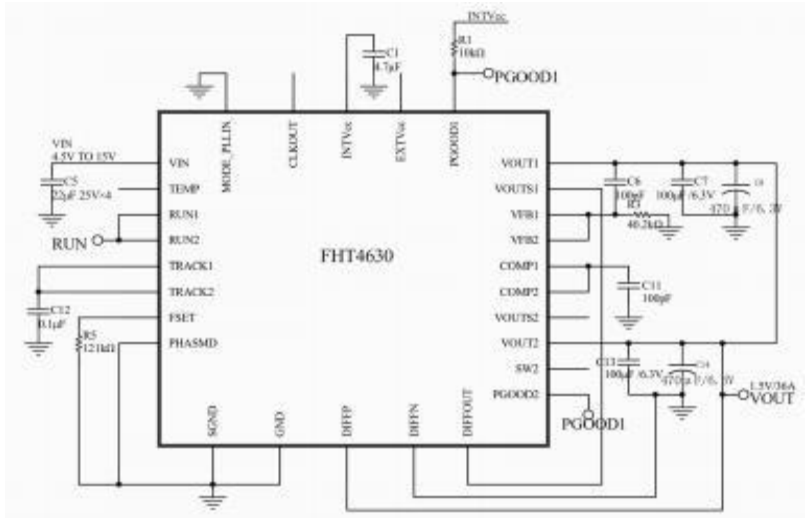
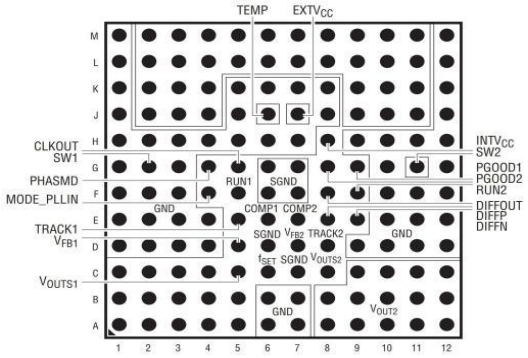
FHT4630

Typical Applications





Pin Configuration



Pin	Symbol	Description
A1-A5, B1-B5, C1-C4	VOUT1	Power output 1 pin. Connect the output load between VOUT1 and GND. A filter capacitor needs to be placed between VOUT1 and GND.
A6-A7, B6-B7, D1-D4, D9-D12, E1-E4, E10-E12, F1-F3, F10-F12, G1, G3, G10, G12, H1-H7, H9-H12, J1, J5, J8, J12, K1, K5-K8, K12, L1, L12, M1 , M12	GND	Power ground pins for inputs and outputs.
A8-A12, B8-B12, C9-C12	VOUT2	Power Output 2 pin. Connect the output load between VOUT2 and GND. A filter capacitor needs to be placed between VOUT2 and GND.
C5, C8	VOUTS1, VOUTS2	Output voltage sampling pin. This pin is internally connected via a resistor to the corresponding feedback pin (VFB1/2). This pin can be connected directly to the output (VOUT). When a remote sampling amplifier is used, it can be connected to the DIFFOUT pin. When used in parallel, connect either VOUTS1 and VOUTS2 to the DIFFOUT pin or the VOUT pin. This pin cannot be left open.

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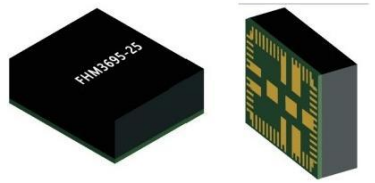
FHT3695-25

20A Output DC-DC SiP Package Buck Module



Main Applications

- Telecommunications and network systems
- Industrial equipment
- Servers and computing
- FPGA/ASIC for AI and data mining
- Smart cards, satellite navigation, solid-state drives

Product Features

- Input voltage range: 4V to 16V
- Adjustable output voltage: 0.6V to 5.5V
- Maximum efficiency: 95%
- Rated output current: 20A
- Maximum output current: 25A
- Multi-phase parallel operation: Up to 8 phases can be paralleled, with a parallel maximum current of 200A
- Dimensions: 10mm × 12mm × 4.32mm (LGA)

Product Description

- The FHM3695-25 is a scalable, fully integrated power module with a PMBus interface. It provides a complete power solution capable of delivering up to 25A maximum output current, with excellent load regulation and line regulation. The module operates efficiently over a wide load range and can be paralleled to provide higher load currents.

- The FHM3695-25 uses Multi-Phase Constant On-Time (MCOT) control, which offers ultra-fast transient response and simple loop compensation. The PMBus interface provides configuration and monitoring of key parameters.

- The FHM3695-25 includes comprehensive protection features such as overcurrent protection (OCP), overvoltage protection (OVP), undervoltage protection (UVP), and overtemperature protection (OTP). It minimizes the use of external components and is available in an LGA-59 package (10mm × 12mm × 4.32mm).

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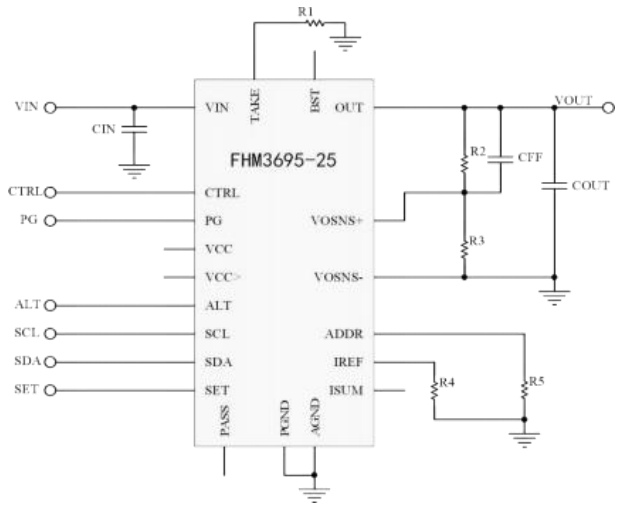
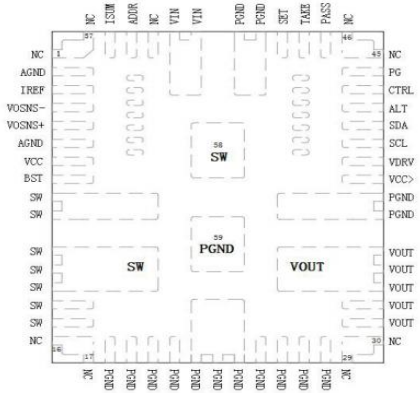
FHT3695-25

Typical Applications



Pin Configuration



Pin	Symbol	Description
2,6	AGND	Signal ground pin.
3	IREF	Reference output current pin, keep this pin floating.
4	VOSNS-	Output voltage negative sense pin. Connect directly to the GND at the load side. If remote sensing is not used, short it to GND.
5	VOSNS+	Positive output voltage sense pin. Connect this pin to the positive sense point of the output voltage to provide feedback voltage to the system.
7	VCC	Output of the internal 5V LDO.
8	BST	Bootstrap pin. Floating.
9-15,58	SW	Switch output pin. Floating.
31-35	VOUT	Module voltage output pin
18-28,36,37, 50,51,59	PGND	Power ground pin.
38	VCC>	Power supply input for the drive circuit. Connect to the VCC pin (pin 7).
39	VDRV	Power supply pin for drive and control circuits. Connect a 4.7 μF capacitor to ground.
40	SCL	PMBus clock pin.
41	SDA	PMBus data pin.
42	ALT	PMBus alert pin.
43	CTRL	Enable pin. A signal input pin used to turn the module on or off. Connect CTRL to VCC through a pullup resistor. Do not leave this pin floating.
44	PG	Output status indication pin. It indicates a high level through a pullup resistor if the output voltage is within the specified range.
47	PASS	Voltage loop control signal pin.
48	TAKE	Phase address setting pin. Connect a resistor to ground to set the PWM phase.
49	SET	Synchronization pin. Connect the SET pins of all modules operating in parallel together to synchronize PWM timing.
52,53	VIN	Power supply voltage input pin.
55	ADDR	PMBus address setting pin. Connect a resistor between this pin and AGND to set the module's address.
56	ISUM	Current sharing pin. For single-phase applications, keep this pin floating; for multi-phase applications, connect the ISUM pins of all phases together.
1, 16,17,29, 30,45,46,54,57	NC	Empty

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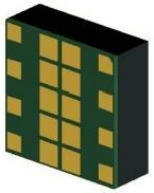
FHT3550A

3.5V to 40V Input, 5A Output DC-DC SiP Package Buck Module



Main Applications

- Industrial equipment
- Telecommunications and network systems
- Power distribution systems and Point-of-Load (POL) systems
- Smart cards, satellite navigation, solid-state drives

Product Features

- 5A continuous output current
- Wide input voltage range: 3.5V to 40V
- Adjustable output voltage: 1.0V to 12.0V
- Adjustable switching frequency: 200kHz to 2.2MHz
- Efficiency up to 95%
- Power Good (PG) output indication
- Internal fixed soft-start time
- Small LGA package (12mm × 12mm × 4.32mm)

Product Description

- The FHT3550A is a high-density, non-isolated DC-DC power module suitable for applications with stringent size requirements. It provides a highly compact solution with a wide input voltage range and the ability to deliver a continuous 5A output current, featuring fast transient response and excellent stability.

- The FHT3550A offers an adjustable output voltage range of 1.0V to 12.0V through an external feedback resistor (default output is 3.3V) and achieves ultra-high efficiency using synchronous rectification and advanced control techniques.

- Standard features of the FHT3550A include:
  Internal fixed soft-start functionality
  Remote enable control
  Power Good (PG) output indication
- The FHT3550A also includes comprehensive protection features:
  Overcurrent protection (OCP)
  Short-circuit protection (SCP)
  Input undervoltage lockout protection (UVLO)
  Overtemperature protection (OTP)

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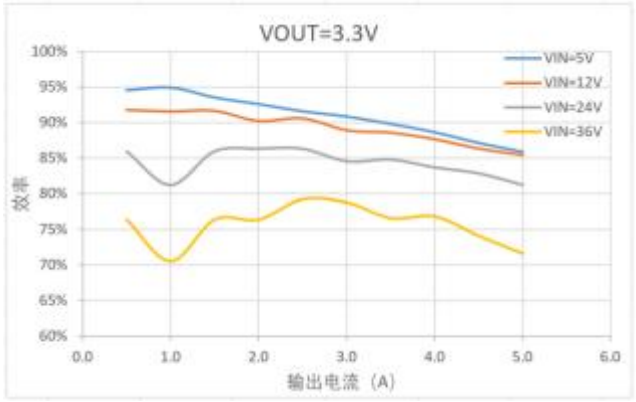
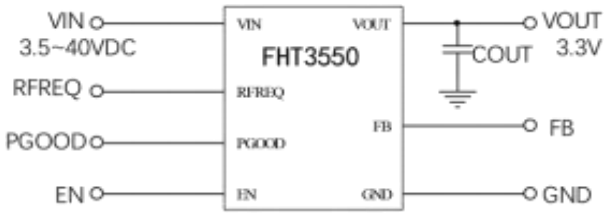
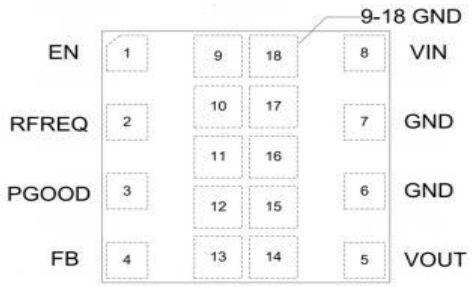
FHT3550A

Typical Applications





Pin Configuration



Pin	Symbol	Description
1	EN	**Enable Pin.** Driving EN to a high level turns the module on. Driving EN to a low level turns the module off.
2	RFREQ	RFREQ is the input voltage and frequency setting pin connected to the GND pin to determine the on-state period. The RFREQ pin must not be dangled.
3	PGOOD	**Power Supply Normal Output Indicator Pin.** If the output voltage exceeds 90% of the rated voltage, the voltage at the PGOOD pin is pulled high. If the output voltage is less than 85% of the rated voltage, the voltage at the PGOOD pin is pulled low.
4	FB	**Voltage Feedback Pin** The FHT3550 feedback point voltage is 1 V. For output voltages less than 3.3 V, it is set by connecting an external resistor (RFB1) between the FB pin and the VOUT pin. For applications where the output voltage is greater than 3.3V, the setting is made by connecting an external resistor (RFB2) between the FB pin and GND.
5	VOUT	**Output Voltage Pin.** VOUT is connected inside the module to the internal power inductor and output capacitor. Connect VOUT to the output load and, if desired, connect an external bypass capacitor between VOUT and VIN.
6, 7, 9-18	GND	**Module Land.**
8	VIN	**The module voltage input pin.** vin powers the converter. Connect VIN to the input power supply. If desired, connect an external bypass capacitor between VIN and the GND pin.

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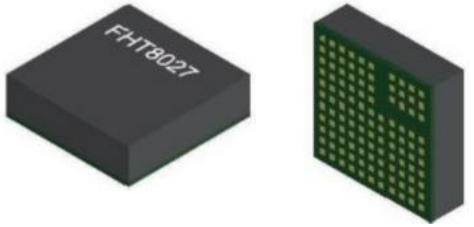
FHT8027

4A Output DC-DC SiP Package Buck Module



Main Applications

- 12V and 42V automotive and heavy equipment
- 48V telecommunications power supplies
- Avionics and industrial control systems
- Distributed power converters
- Smart cards, satellite navigation, solid-state drives

Product Features

- 4A full-load output current
- Wide input voltage range: 5V to 60V
- Adjustable output voltage: 2.5V to 24V
- Selectable switching frequency
- Efficiency up to 95%
- Shutdown current: 15μA
- Programmable soft start
- Compact LGA package (15mm × 15mm × 4.32mm)

Product Description

- The FHT8027 is a integrated power buck module that incorporates a switch controller, inductor, and related support components in a compact package measuring 15.0mm × 15.0mm × 4.32mm.

- Based on a synchronous rectified Buck topology, it can deliver up to 4A of output current with a power conversion efficiency of up to 95%. It can convert input voltages from 5V to 60V to output voltages ranging from 2.5V to 24V. The frequency can be programmed by an external resistor, with a range of 100kHz to 1MHz. The soft-start time can be adjusted using a small capacitor.

- The FHT8027 features an integrated compact LGA package. Only a single voltage-setting resistor and a few input and output filter capacitors are required externally to quickly configure the power system.

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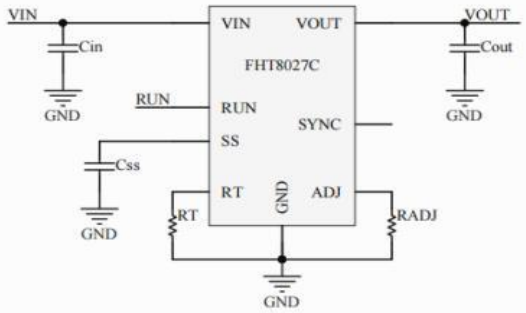
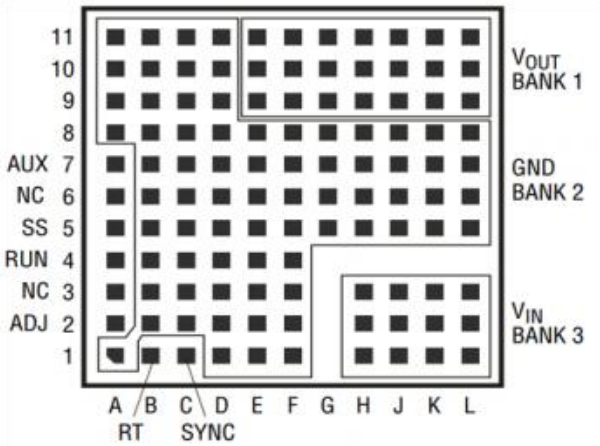
FHT8027

Typical Applications



Pin Configuration



Pin	Symbol	Description
BANK1	V_{OUT}	Module voltage output pin.
BANK2	GND	Ground pin.
BANK3	V_{IN}	Module voltage input pin.
A2	ADJ	Voltage adjustment pin, connect a voltage-regulating resistor with an accuracy of over 1% to GND.
A3、A6	NC	Floating
A7	AUX	Internally connected to VOUT, but do not connect it to the load.
A4	RUN	Control pin, grounding this pin can shut down the module. When the voltage at this pin is below 0.4V, the module is in shutdown mode; when the voltage is between 0.4V and 1.2V, the module enters standby mode; when the voltage exceeds 1.2V, the module enters operating mode. Once the voltage rises above 1.2V, an internal 10uA current source is activated, flowing through an external UVLO resistor divider to create hysteresis. The hysteresis of the RUN pin can be adjusted via external resistor division.
B1	RT	Connect a resistor between this pin and ground to set the switching frequency. Even when synchronizing with an external clock using the external SYNC pin, an RT resistor needs to be connected.
C1	SYNC	External clock input for synchronizing the internal oscillator.
A5	SS	Used to set external soft-start. The minimum capacitance from SS to AGND is 2.2nF

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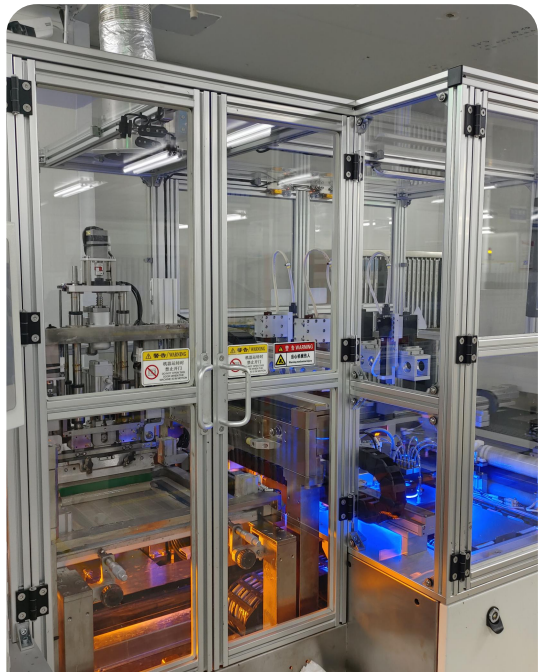
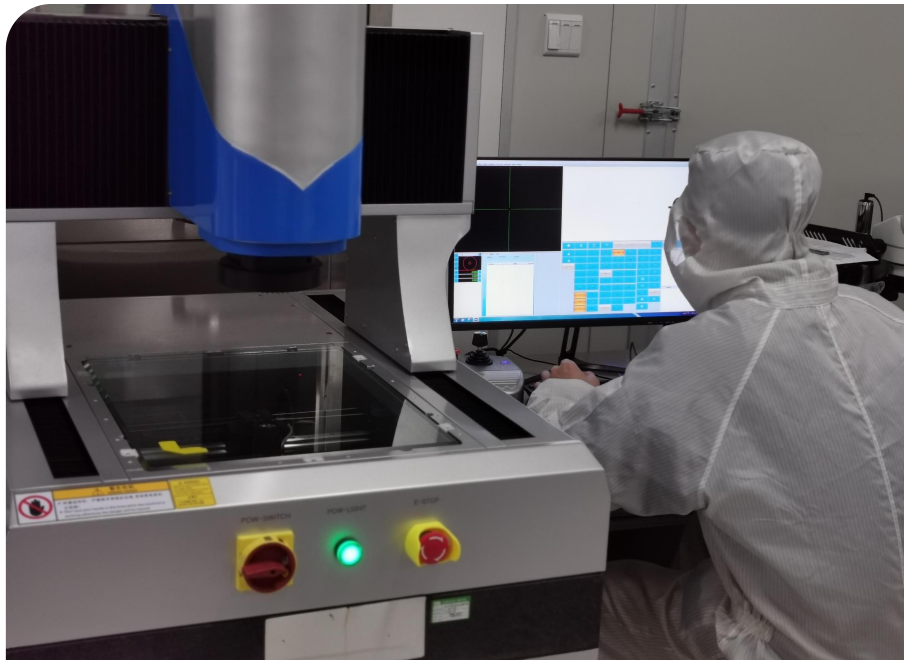
Industrial Isolated Power Modules





1~2W, 1500~3000VDC Isolation, Single Inline Package(SIP)

- Sustainable Short-Circuit Protection
- High Efficiency, Low No-Load Power Consumption
- Operating Temperature Range: -40°C to +105°C
- Isolation Voltage: 1500/3000VDC
- International Standard Pin Configuration, Compact SIP Package
- Designed to Meet: UL62368/EN62368/BS EN62368 Standards

Product Series	Output Power/ Current	Output Range (VDC)	Output Voltage (VDC)	Isolation Voltage (VDC)	Dimensions (Length * Width * Height mm)
B01-xxxxS	1W	3.3, 5, 12, 15, 24 (±10%)	3.3, 5, 9, 12, 15, 24	1500	11.60*6.00*10.16
B02-xxxxS	2W	5, 12, 24 (±10%)	5, 9, 12, 15, 24	1500	11.60*6.00*10.16
B01-xxxxLS	1W	3.3, 5, 12, 15, 24 (±10%)	3.3, 5, 9, 12, 15, 24	1500	19.65*6.00*10.16
A01-xxxxLS	1W	5, 12, 24 (±10%)	±3.3, ±5, ±9, ±12, ±15, ±24	1500	19.65*6.00*10.16
F01-xxxxS	1W	5, 12, 15, 24 (±10%)	3.3, 5, 9, 12, 15, 24	3000	19.65*6.00*10.16
E01-xxxxS	1W	5, 12, 15, 24 (±10%)	±3.3, ±5, ±9, ±12, ±15, ±24	3000	19.65*6.00*10.16
B02-xxxxLS	2W	5, 12, 15, 24 (±10%)	3.3, 5, 9, 12, 15, 24	1500	19.65*6.00*10.16
A02-xxxxLS	2W	5, 12, 15, 24 (±10%)	±3.3, ±5, ±9, ±12, ±15, ±24	1500	19.65*6.00*10.16
F02-xxxxS	2W	5, 12, 15, 24 (±10%)	±3.3, ±5, ±9, ±12, ±15, ±24	3000	19.65*6.00*10.16
E02-xxxxS	2W	5, 12, 15, 24 (±10%)	±3.3, ±5, ±9, ±12, ±15, ±24	3000	19.65*6.00*10.16

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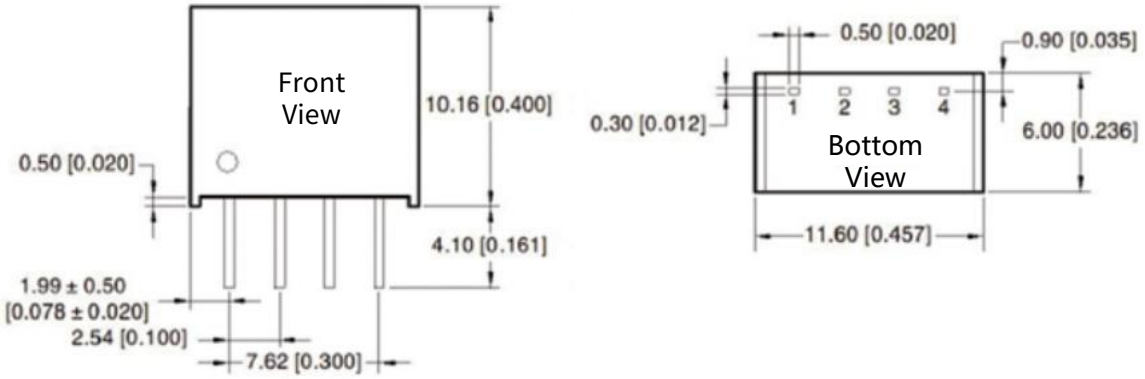
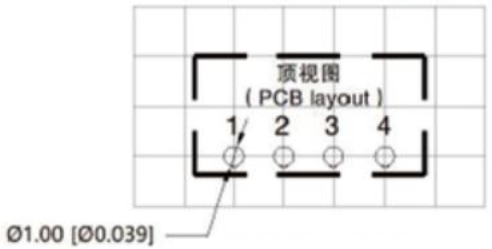
Package Dimensions

(1)



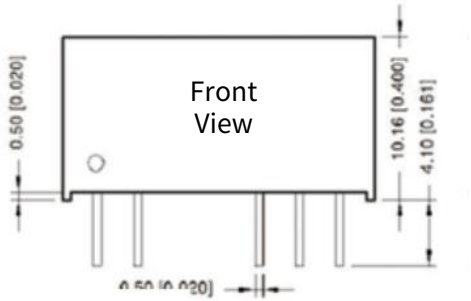
Third-Angle Projection

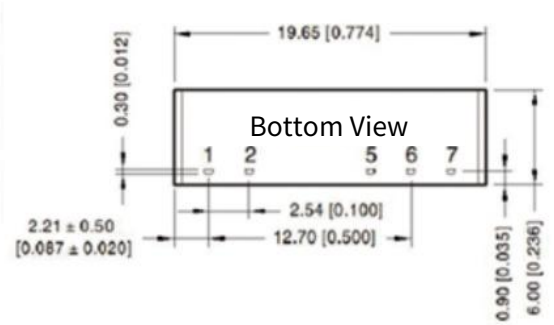


引脚	功能
1	GND
2	Vin
3	0V
4	+Vo

Note: Grid Distance is 2.54*2.54mm

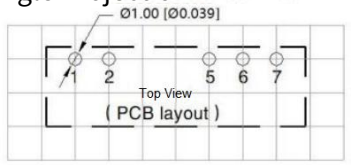
(2)



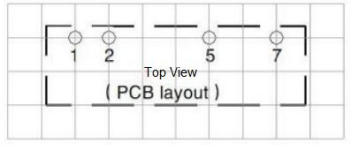


Third-Angle Projection

Dual-Channel Output



Single-Channel Output



Pin	Single-channel	Dual-channel
1	Vin	Vin
2	GND	GND
5	0V	-Vo
6	No Pin	0V
7	+Vo	+Vo

Note: Grid Distance is 2.54*2.54mm

Notes:
- Dimension unit: mm (inch)
- Terminal cross-sectional tolerance: ±0.10 (±0.004)
- Unmarked tolerance: ±0.25 (±0.010)

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1~2W, 1500~3000VDC Isolation, Dual Inline Package (DIP)

- Sustainable Short-Circuit Protection
- High Efficiency, Low No-Load Power Consumption
- Operating Temperature Range: -40°C to +105°C
- Isolation Voltage: 1500/3000VDC
- International Standard Pin Configuration, Compact SIP Package
- Designed to Meet: UL62368/EN62368/BS EN62368 Standards

Product Series	Output Power/ Current	Output Range (VDC)	Output Voltage (VDC)	Isolation Voltage (VDC)	Dimensions (Length * Width * Height mm)
A01-xxxxD	1W	5, 12, 15, 24 (±10%)	±5, ±9, ±12, ±15, ±24	1500	20.0*10.0*7.0
F01-xxxxD	1W	5, 12, 15, 24 (±10%)	3.3, 5, 12, 15	3000	20.0*10.0*7.0
E01-xxxxD	1W	5 (4.5-5.5)	±3.3, ±5, ±9, ±12, ±15	3000	20.0*10.0*7.0
A02-xxxxD	2W	5, 12, 15, 24 (±10%)	±3.3, ±5, ±9, ±12, ±15	1500	20.0*10.0*7.0
F01-xxxxN	1W	3.3, 5, 12, 15, 24 (±10%)	3.3, 5, 9, 12, 15, 24	3000	12.70*10.16*8.20
F02-xxxxD	2W	5, 12, 15, 24 (±10%)	5, 9, 12, 15, 24	3000	20.0*10.0*7.0
E02-xxxxD	2W	5, 12, 15, 24 (±10%)	±5, ±9, ±12, ±15, ±24	3000	20.0*10.0*7.0

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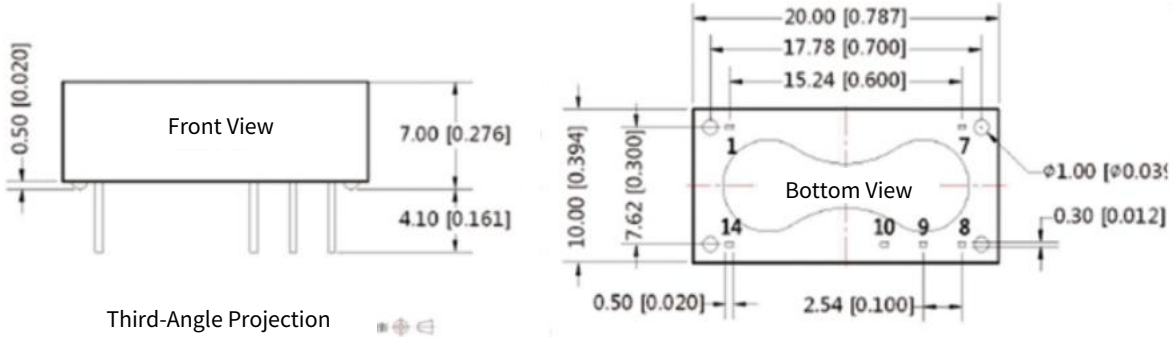
Package Dimensions

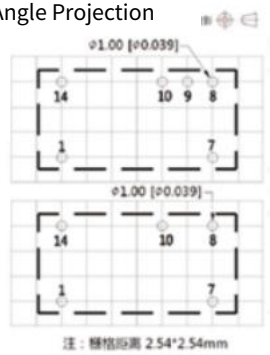
(1)



Third-Angle Projection

Dual-channel with positive and negative polarity

Single-channel

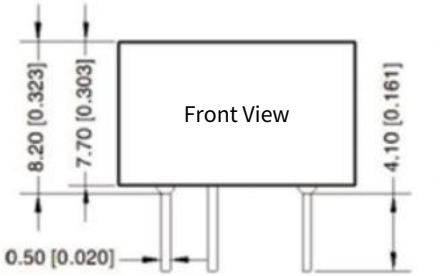


Note: Grid Distance is 2.54*2.54mm

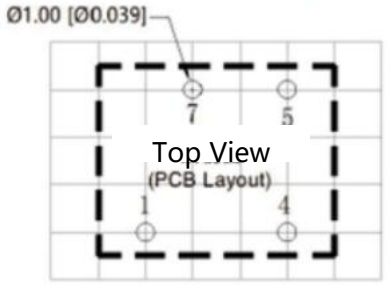
Pin	Single-channel	Dual-channel
1	GND	GND
7	NC	NC
8	+Vo	+Vo
9	No Pin	0V
10	0V	-Vo
14	Vin	Vin

NC: Do not connect to any external circuit

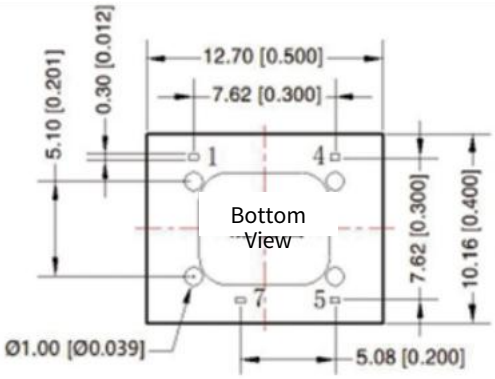
(2)



第三角投影



Note: Grid Distance is 2.54*2.54mm



Pin	Function
1	GND
4	Vin
5	+Vo
7	0V

Notes:

- Dimension unit: mm (inch)
- Terminal cross-sectional tolerance: ±0.10 (±0.004)
- Unmarked tolerance: ±0.25 (±0.010)

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1~2W, 6000VDC Isolation, Single Inline Package (SIP)

- Isolation Voltage: 5kVAC/6kVDC, Enhanced Insulation
- Electrical Clearance & Creepage Distance: >5mm
- Ultra-low Isolation Capacitance
- Maximum Patient Leakage Current: 2uA
- Efficiency Up to 84%
- Operating Temperature Range: -40°C to +105°C
- International Standard SIP Pin Configuration

Product Series	Output Power/Current	Output Range (VDC)	Output Voltage (VDC)	Isolation Voltage (VDC)	Dimensions (Length * Width * Height mm)
H01-xxxxS	1W	5, 12, 15, 24 (±10%)	5, 12, 15, 24	5kVAC/6kVDC	19.5*9.8*12.5
H02-xxxxS	2W	12, 15, 24 (±10%)	5, 12, 15	5kVAC/6kVDC	19.5*9.8*12.5
G01-xxxxS	1W	5, 12, 15, 24 (±10%)	±5, ±9, ±12, ±24	5kVAC/6kVDC	19.5*9.8*12.5
G02-xxxxS	2W	12, 15, 24 (±10%)	±5, ±9, ±12, ±15	5kVAC/6kVDC	19.5*9.8*12.5

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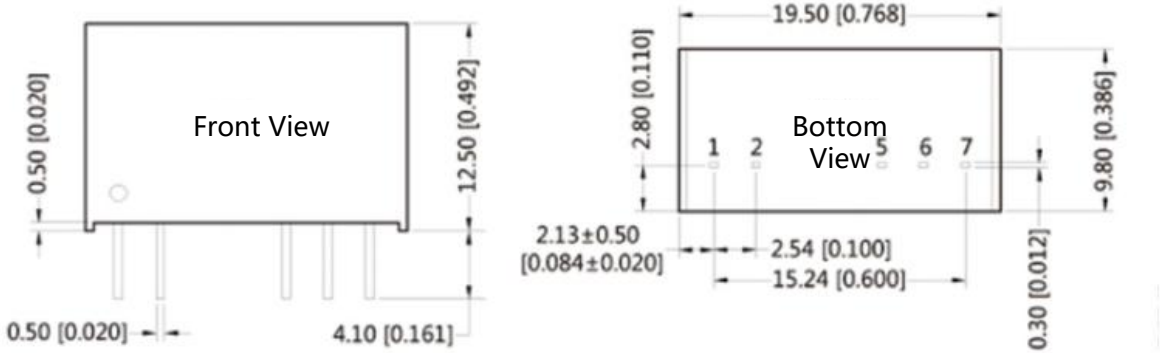
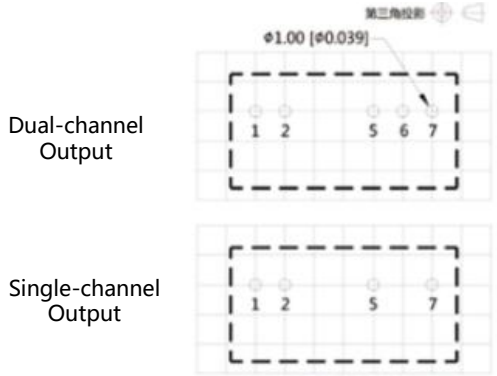
Package Dimensions



Third-Angle Projection



Pin	Single-channel	Dual-channel
1	Vin	Vin
2	GND	GND
5	0V	-Vo
6	No Pin	0V
7	+Vo	+Vo

Note: Grid Distance is 2.54*2.54mm

Notes:

- Dimension unit: mm (inch)
- Terminal cross-sectional tolerance: ±0.10 (±0.004)
- Unmarked tolerance: ±0.25 (±0.010)

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1~2W, 6000VDC Isolation, Ultra-Compact, Single Inline Package (SIP)

H-CS:

· Isolation Voltage: 5kVAC/6kVDC, Enhanced Insulation
· Complies with CTI Grade 1
· Electrical Clearance & Creepage Distance: >16mm
· Ultra-low Isolation Capacitance: Down to 7pF
· Sustained Short-Circuit Protection
· Operating Temperature Range: -40°C to +105°C
· International Standard Pin Configuration

H-LS:

· Isolation Voltage: 4.2kVAC/6kVDC, Enhanced Insulation
· Electrical Clearance & Creepage Distance: >5mm
· Ultra-low Isolation Capacitance
· Maximum Patient Leakage Current: 2uA
· Efficiency Up to 84%
· Operating Temperature Range: -40°C to +105°C
· Ultra-small SIP Package

Product Series	Output Power/Current	Output Range (VDC)	Output Voltage (VDC)	Isolation Voltage (VDC)	Dimensions (Length * Width * Height mm)
H01-xxxxLS	1W	5 (4.5~5.5)	5, 12, 15	4.2kVAC/6kVDC	19.65*6.00*10.16
H02-xxxxLS	2W	5 (4.5~5.5)	5, 12, 15	4.2kVAC/6kVDC	19.65*6.00*10.16
H01-xxxxCS	1W	5 (4.5~5.5)	5	5kVAC/7kVDC	27.40*9.50*12.00
H02-xxxxCS	2W	12 (10.8~13.2)	5, 12	5kVAC/7kVDC	27.40*9.50*12.00

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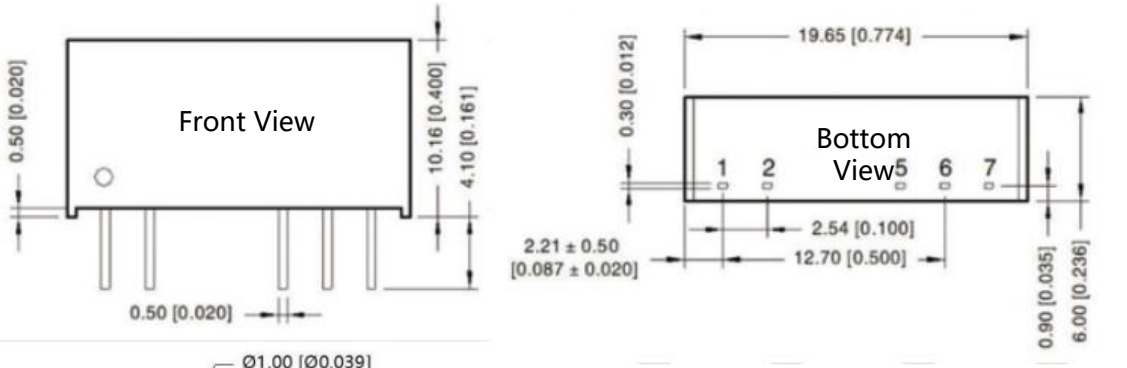
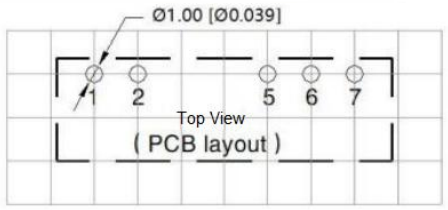
Package Dimensions

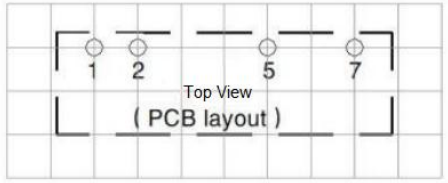
(1)



Dual-channel Output



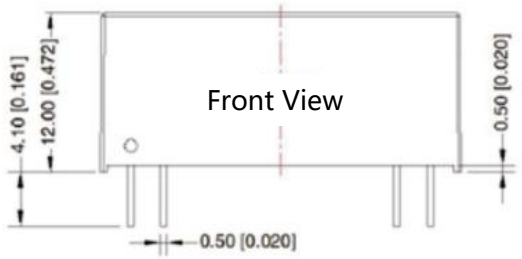
Single-channel Output



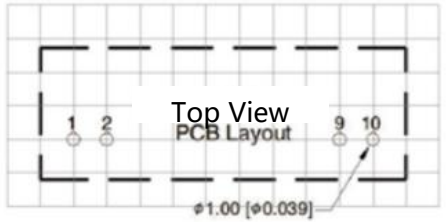
Pin	Single-channel	Dual-channel
1	Vin	Vin
2	GND	GND
5	0V	-Vo
6	No Pin	0V
7	+Vo	+Vo

Note: Grid Distance is 2.54*2.54mm

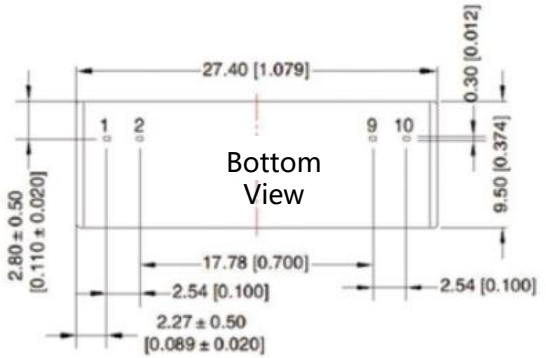
(2)



Third-Angle Projection



Note: Grid Distance is 2.54*2.54mm



Pin	Function
1	Vin
2	GND
9	0V
10	Vo

Notes:

- Dimension unit: mm (inch)
- Terminal cross-sectional tolerance: ±0.10 (±0.004)
- Unmarked tolerance: ±0.25 (±0.010)

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1~2W,1500~3000VDC Isolation, Voltage Stabilization, Single Inline Package

- Low-cost regulated output
- Continuous short-circuit protection
- High efficiency with low no-load power consumption
- Operating temperature range: -40°C to +105°C
- Isolation voltage: 1500VDC
- International standard pin configuration, ultra-miniature SIP package
- Designed to meet UL62368/EN62368/BS EN62368 standards

Product Series	Output Power/Current	Output Range (VDC)	Output Voltage (VDC)	Isolation Voltage (VDC)	Dimensions (Length * Width * Height mm)
IBW75-xxxxS	0.75W	12, 24 (±5%)	3.3, 5, 12, 15	1500	11.6*6.0*10.16
IB01-xxxxLS	1W	5, 12, 15, 24 (±5%)	3.3, 5, 9, 12, 15, 24	1500	19.65*6.00*10.16
IF01-xxxxS	1W	5, 12, 15, 24 (±5%)	3.3, 5, 9, 12, 15, 24	3000	19.65*6.00*10.16
IB02-xxxxLS	2W	5, 12, 15, 24 (±5%)	5, 12, 15	1500	19.65*6.00*10.16

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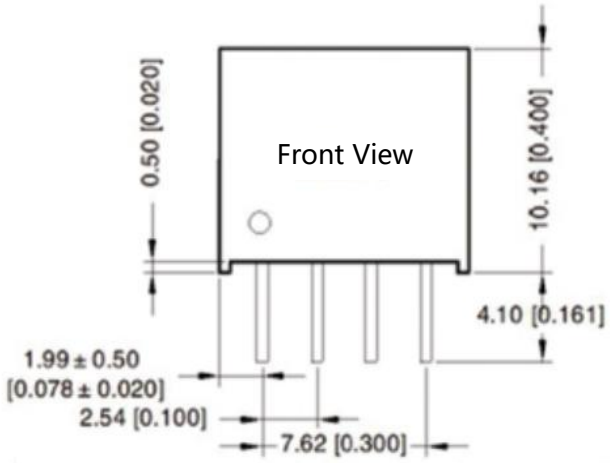
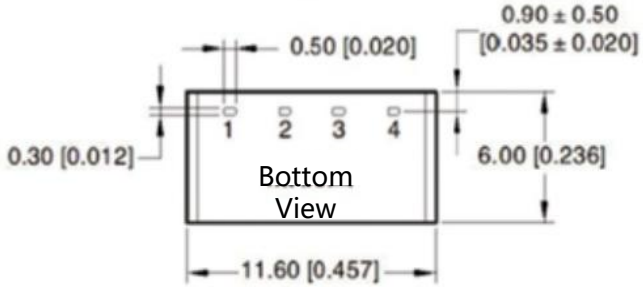
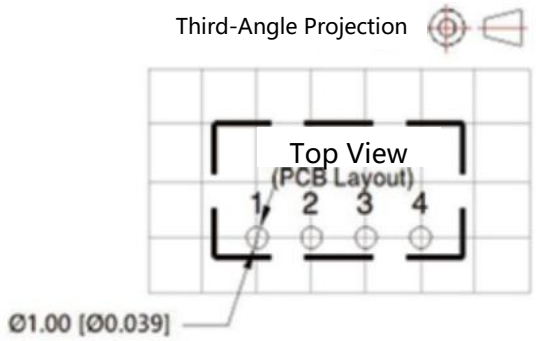
Package Dimensions

(1)



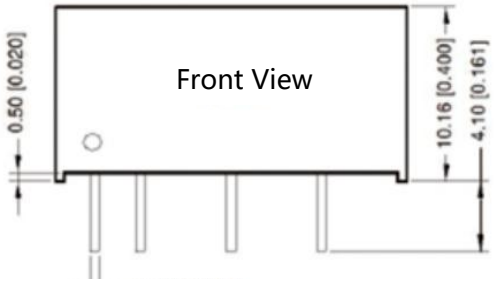


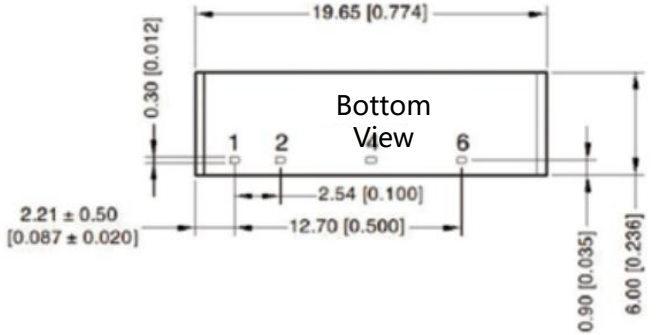


Pin	Function
1	GND
2	Vin
3	+Vo
4	0V

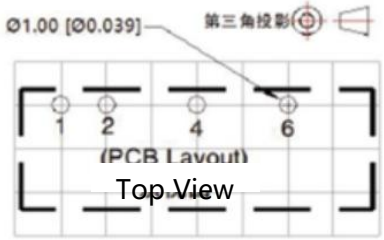
Note: Grid Distance is 2.54*2.54mm

(2)





Third-Angle Projection



Pin	Function
1	Vin
2	GND
4	0V
6	+Vo

Note: Grid Distance is 2.54*2.54mm

Notes:

- Dimension unit: mm (inch)
- Terminal cross-sectional tolerance: ±0.10 (±0.004)
- Unmarked tolerance: ±0.25 (±0.010)

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3~6W,1500~3000VDC Single Inline Package (SIP)

- Ultra-wide input voltage range (4:1)
- High efficiency with low no-load power consumption
- Isolation voltage: 1500/3000VDC
- Protection features: input undervoltage, output short-circuit/overcurrent protection
- Operating temperature range: -40°C to +105°C
- Designed to comply with: UL62368/EN62368/BS EN62368/EN50155
- International standard pin configuration, SIP compact package

Product Series	Output Power/Current	Output Range (VDC)	Output Voltage (VDC)	Isolation Voltage (VDC)	Dimensions (Length * Width * Height mm)
XUB03-xxxxS	3W	12 (4.5~18) 24 (9~36) 48 (18~75)	3.3, 5, 12, 15, 24	1500	22.0*9.5*12.0
XUF03-xxxxS	3W	12 (4.5~18) 24 (9~36) 48 (18~75)	3.3, 5, 12, 15, 24	3000	22.0*9.5*12.0
XUA03-xxxxS	3W	12 (4.5~18) 24 (9~36) 48 (18~75)	±5, ±12, ±15, ±24	1500	22.0*9.5*12.0
XUE03-xxxxS	3W	12 (4.5~18) 24 (9~36) 48 (18~75)	±5, ±12, ±15, ±24	3000	22.0*9.5*12.0
XUB06-xxxxS	6W	24 (9~36) 48 (18~75)	3.3, 5, 12, 15, 24	1500	22.0*9.5*12.0
XUA06-xxxxS	6W	24 (9~36) 48 (18~75)	±5, ±12, ±15, ±24	1500	22.0*9.5*12.0

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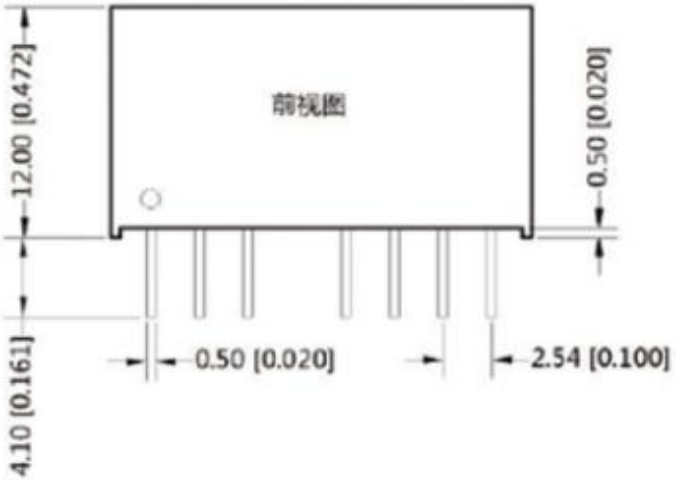
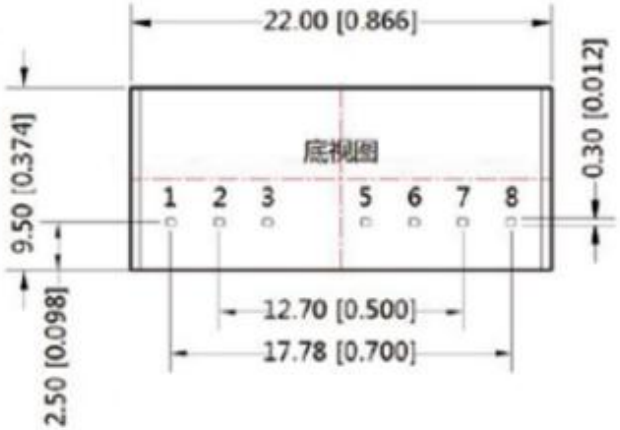
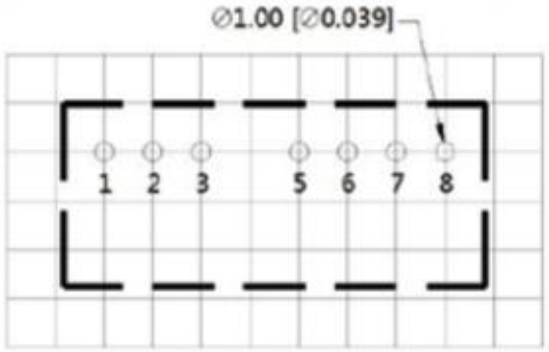
Package Dimensions







注：栅格距离为2.54*2.54mm

引脚方式		
引脚	单路	正负双路
1	GND	GND
2	Vin	Vin
3	Ctrl	Ctrl
5	NC	NC
6	+Vo	+Vo
7	0V	0V
8	CS	-Vo

NC: 不能与任何外部电路连接

Notes:

- Dimension unit: mm (inch)
- Terminal cross-sectional tolerance: ±0.10 (±0.004)
- Unmarked tolerance: ±0.25 (±0.010)

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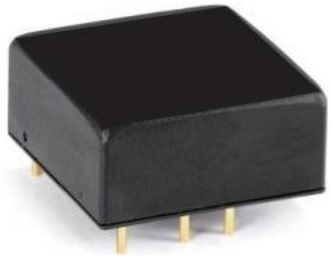
6~10W, 1500VDC Isolation, 1-inch, Dual Inline Package (DIP)



· Ultra-wide input voltage range (4:1)
· High efficiency with low no-load power consumption
· Isolation voltage: 1500VDC
· Protection features: Input undervoltage protection, output short-circuit/overcurrent/overvoltage protection
· Operating temperature range: -40°C to +85°C
· Designed to comply with: UL62368, EN62368, BS EN62368, and EN50155

Product Series	Output Power/Current	Output Range (VDC)	Output Voltage (VDC)	Isolation Voltage (VDC)	Dimensions (Length * Width * Height mm)
XUB06-xxxxMD	6W	24 (9~36) 48 (18~75)	3.3, 5, 9, 12, 15, 24	1500	25.4*25.4*11.7
XUA06-xxxxMD	6W	24 (9~36) 48 (18~75)	±5, ±12, ±15, ±24	1500	25.4*25.4*11.7
XUB10-xxxxMD	10W	24 (9~36) 48 (18~75)	3.3, 5, 9, 12, 15, 24	1500	25.4*25.4*11.7
XUA10-xxxxMD	10W	24 (9~36) 48 (18~75)	±5, ±9, ±12, ±15, ±24	1500	25.4*25.4*11.7

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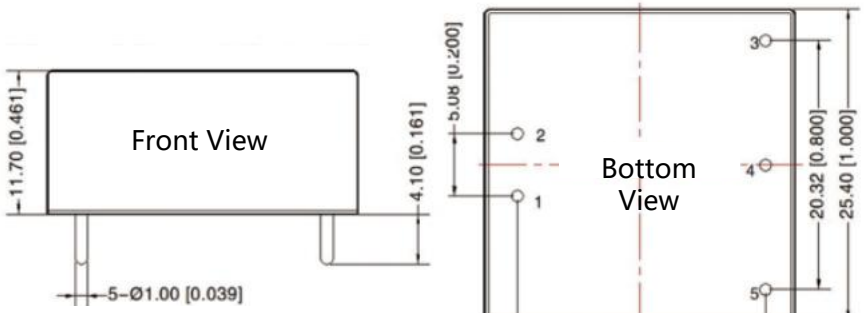
Package Dimensions

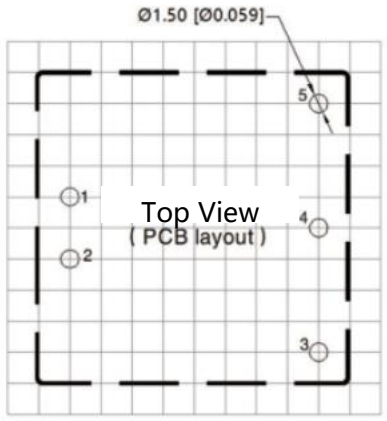
(1)Suitable for 6W applications



Third-Angle Projection

Dual-channel with positive and negative polarity

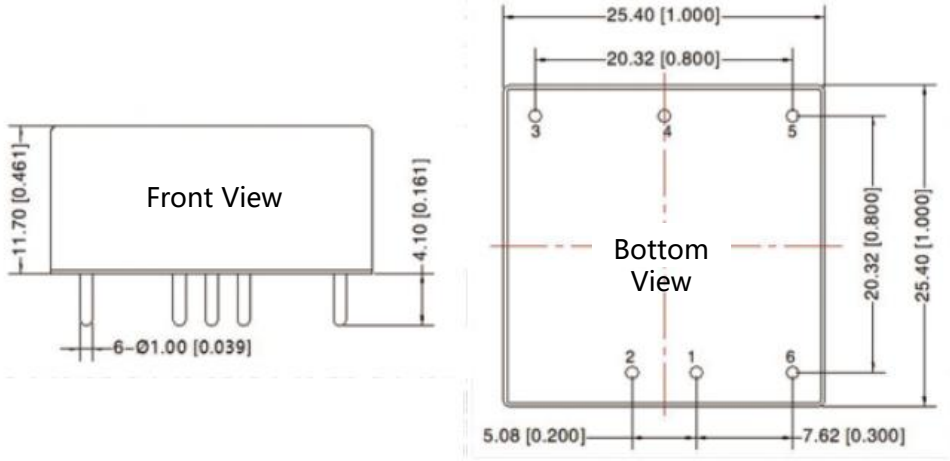
Single-channel

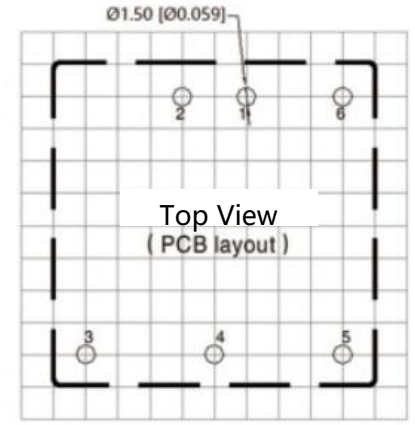


Pin	Single-channel	Dual-channel
1	GND	GND
2	Vin	Vin
3	+Vo	+Vo
4	No Pin	0V
5	0V	-Vo

Note: Grid Distance is 2.54*2.54mm

(2)Suitable for 10W applications





Pin	Single-channel	Dual-channel
1	GND	GND
2	Vin	Vin
3	+Vo	+Vo
4	No Pin	0V
5	0V	-Vo
6	Ctrl	Ctrl

Note: Grid Distance is 2.54*2.54mm

Notes:

- Dimension unit: mm (inch)
- Pin1/2/3/4/5/6:φ1.0mm
- Terminal cross-sectional tolerance: ±0.10 (±0.004)
- Unmarked tolerance: ±0.25 (±0.010)

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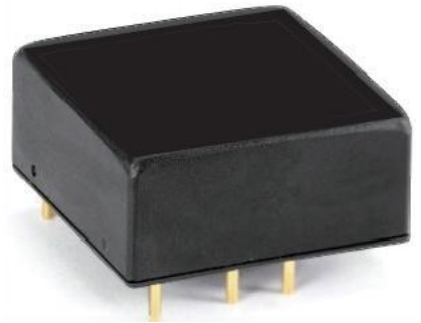
15~40W,1500VDC Isolation, 1×1 inch, Dual-In-Line Package (DIP)



- Ultra-wide input voltage range (4:1)
- High efficiency, high power density
- Isolation voltage: 1500VDC
- Protection features: Input undervoltage, output short circuit/ overcurrent/ overvoltage protection
- Operating temperature range: -40°C to +105°C
- Design compliance: UL62368/EN62368/BS EN62368/EN50155

Product Series	Output Power/Current	Output Range (VDC)	Output Voltage (VDC)	Isolation Voltage (VDC)	Dimensions (Length * Width * Height mm)
XUB15-xxxxMD	15W	24 (9~36) 48 (18~75)	3.3, 5, 12, 15, 24	1500	25.4*25.4*11.7
XUA15-xxxxMD	15W	24 (9~36) 48 (18~75)	5, 12, 15, 24	1500	25.4*25.4*11.7
XUB20-xxxxMD	20W	24 (9~36) 48 (18~75)	3.3, 5, 12, 15, 24	1500	25.4*25.4*11.7
XUA20-xxxxMD	20W	24 (9~36) 48 (18~75)	±5, ±12, ±15, ±24	1500	25.4*25.4*11.7
XUB30-xxxxMD	30W	24 (9~36) 48 (18~75)	5, 12, 15, 24	1500	25.4*25.4*11.7
XUA30-xxxxMD	30W	24 (9~36) 48 (18~75)	±5, ±12, ±15, ±24	1500	25.4*25.4*11.7
XUB40-xxxxMD *	40W	24 (9~36) 48 (18~75)	3.3, 5, 12, 15, 24	1500	25.4*25.4*11.7

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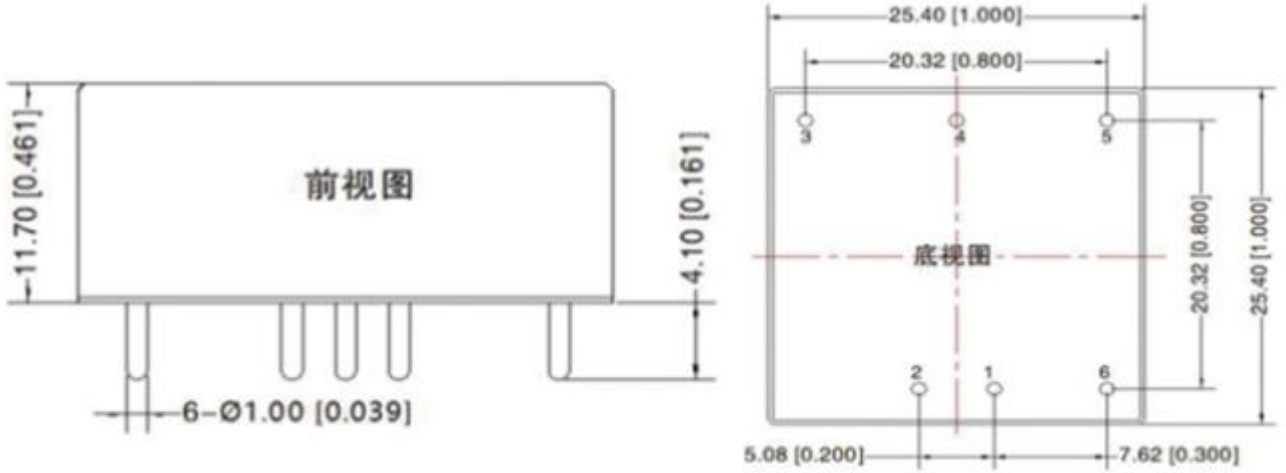
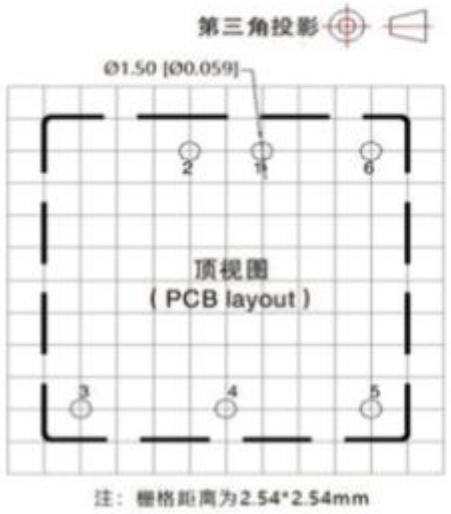
Package Dimensions





引脚方式		
引脚	单路	双路
1	GND	GND
2	Vin	Vin
3	+Vo	+Vo
4	Trim	0V
5	0V	-Vo
6	Ctrl	Ctrl

Notes:
- Dimension units: mm (inch)
- Terminal cross-section tolerance: ±0.10 (±0.004)
- Unmarked tolerances: ±0.25 (±0.010)

Note: Grid Distance is 2.54*2.54mm

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6~10W,1500VDC Isolation, Standard Dual-In-Line Package (DIP)

- Ultra-wide input voltage range (4:1)
- High efficiency, low no-load power consumption
- Isolation voltage: 1500VDC
- Protection features: Input undervoltage, output short circuit/overcurrent/overvoltage protection
- Operating temperature range: -40°C to +105°C
- Design compliance: UL62368/EN62368/BS EN62368/EN50155
- Standard international pin configuration, DIP standard package

Product Series	Output Power/Current	Output Range (VDC)	Output Voltage (VDC)	Isolation Voltage (VDC)	Dimensions (Length * Width * Height mm)
XUB06-xxxxZP	6W	24 (9~36) 48 (18~75)	3.3, 5, 9, 12, 15, 24	1500	32.0*20.0*10.8
XUB10-xxxxZP	10W	24 (9~36) 48 (18~75)	3.3, 5, 9, 12, 15, 24	1500	32.0*20.0*10.8
XUA06-xxxxZP	6W	24 (9~36) 48 (18~75)	±5, ±9, ±12, ±15, ±24	1500	32.0*20.0*10.8
XUA10-xxxxZP	10W	24 (9~36) 48 (18~75)	±5, ±12, ±15	1500	32.0*20.0*10.8

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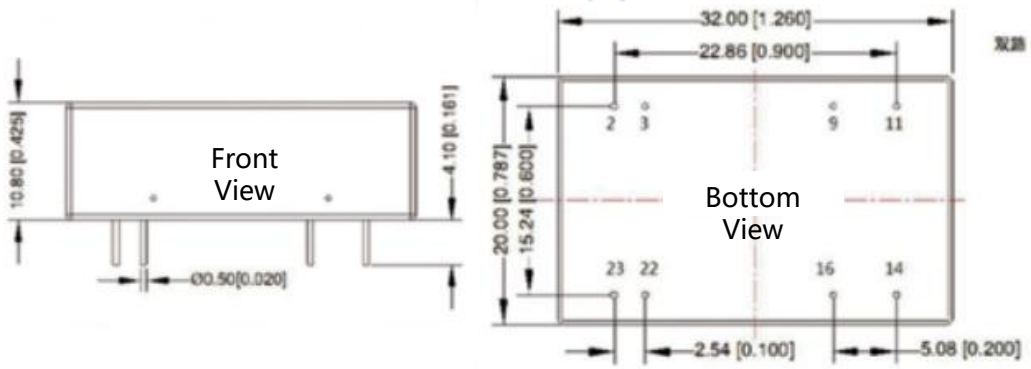
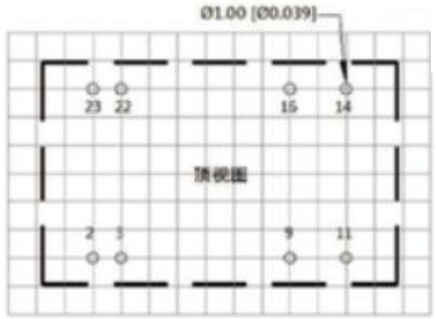
Package Dimensions (1)



Third-Angle Projection

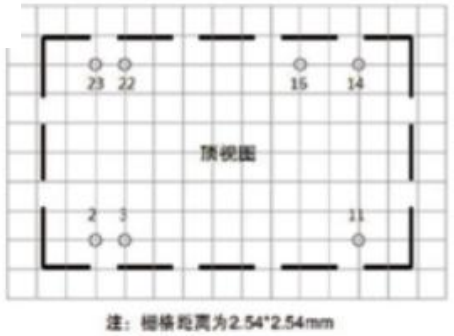
Dual-Channel

Top View



Single-Channel

Top View

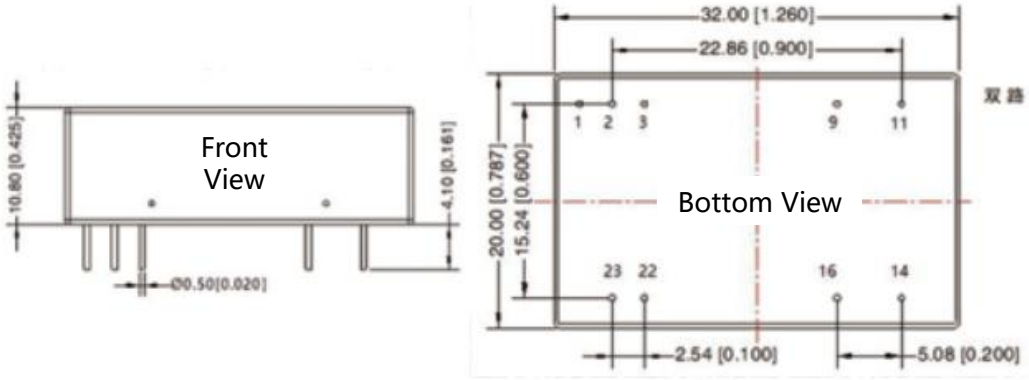


Note: Grid Distance is 2.54*2.54mm

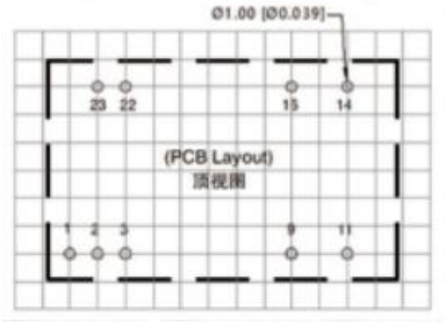
Pin	Single-channel	Dual-channel
2,3	GND	GND
9	No Pin	0V
11	NC	-Vo
14	+Vo	+Vo
16	0V	0V
22,23	Vin	Vin

NC: Do not connect to any external circuits.

(2)Suitable for 10W applications.

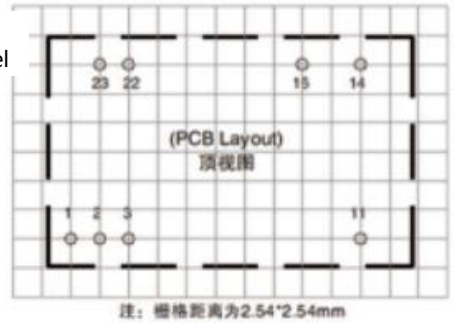


Top View



Top View

Single-Channel



Note: Grid Distance is 2.54*2.54mm

Pin	Single-channel	Dual-channel
1	Ctrl	Ctrl
2,3	GND	GND
9	No Pin	0V
11	NC	-Vo
14	+Vo	+Vo
16	0V	0V
22,23	Vin	Vin

NC: Do not connect to any external circuits.

Notes:
- Dimension units: mm (inch)
- Terminal cross-section tolerance: ±0.10 (±0.004)
- Unmarked tolerances: ±0.50(±0.020)

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20~60W,1500VDC Isolation, 2×1 inch Dual-In-Line Package (DIP)

- Ultra-wide input voltage range (4:1)
- High efficiency, low no-load power consumption
- Isolation voltage: 1500VDC
- Protection features: Input undervoltage, output short circuit/overcurrent/overvoltage protection
- Operating temperature range: -40°C to +105°C
- Design compliance: UL62368/EN62368/BS EN62368/EN50155

Product Series	Output Power/Current	Output Range (VDC)	Output Voltage (VDC)	Isolation Voltage (VDC)	Dimensions (Length * Width * Height mm)
XUB20-xxxxLD	20W	24 (9~36) 48 (18~75)	3.3, 5, 9, 12, 15, 24	1500	50.8*25.4*11.8
XUA20-xxxxLD	20W	24 (9~36) 48 (18~75)	±5, ±9, ±12, ±15	1500	50.8*25.4*11.8
XUB30-xxxxLD	30W	24 (9~36) 48 (18~75)	3.3, 5, 9, 12, 15, 18, 24	1500	50.8*25.4*11.8
XUA30-xxxxLD	30W	24 (9~36) 48 (18~75)	±5, ±12, ±15, ±24	1500	50.8*25.4*11.8
XUB40-xxxxLD	40W	24 (9~36) 48 (18~75)	5, 12, 15, 24	1500	50.8*25.4*11.8
XUA40-xxxxLD	40W	24 (9~36)	±12, ±15, ±24	1500	50.8*25.4*11.8
XVB50-xxxxLD	50	24 (18-36) 48 (36-75)	3.3, 5, 12, 15, 24	1500	50.8*25.4*11.8
XUB60-xxxxLD	60	24 (9~36) 48 (18~75)	5, 12, 15, 24	1500	50.8*25.4*11.8
XUA60-xxxxLD	60	24 (9~36)	±12, ±15, ±24	1500	50.8*25.4*11.8

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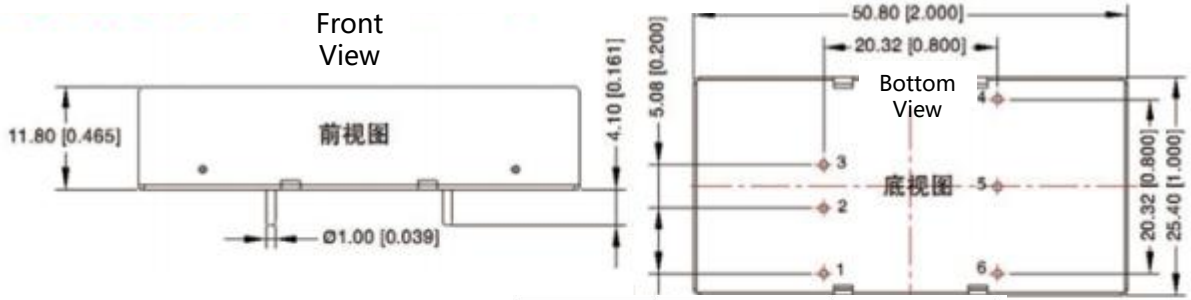
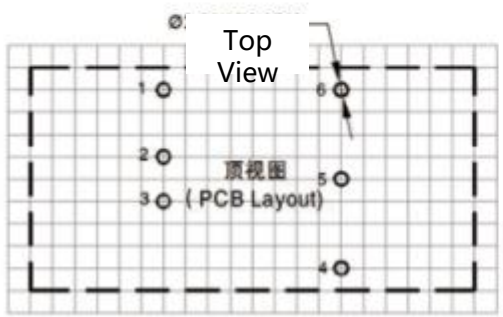
Package Dimensions

(1)Suitable for 20W applications.





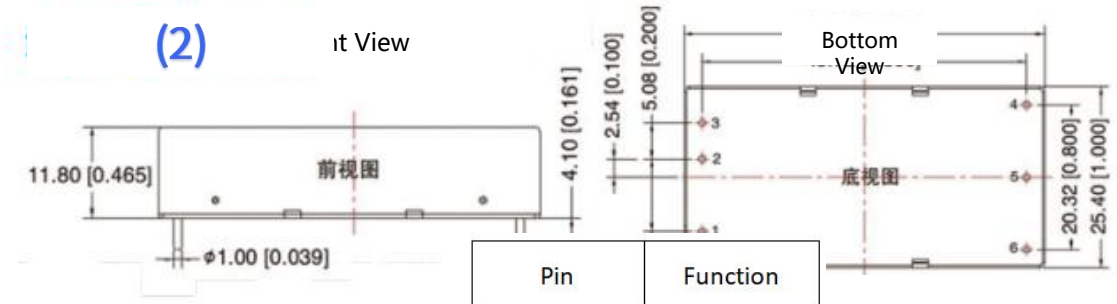
Pin	Single-channel	Dual-channel
1	Ctrl	Ctrl
2	GND	GND
3	Vin	Vin
4	+Vo	+Vo
5	Trim	0V
6	0V	-Vo

注：栅格距离 2.54*2.54mm

Note: Grid Distance is 2.54*2.54mm

Notes:
- Dimension units: mm (inch)
- Terminal cross-section tolerance: ±0.10 (±0.004)
- Unmarked tolerances: ±0.50(±0.020)

(2)



Pin	Function
1	Ctrl
2	GND
3	Vin
4	+Vo
5	0V
6	Trim

注：栅格距离 2.54*2.54mm

Note: Grid Distance is 2.54*2.54mm

Notes:
- Dimension units: mm (inch)
- Unmarked tolerances: ±0.50(±0.020)

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6~10W, High Isolation, Standard Dual-In-Line Package (DIP)

· Ultra-wide input voltage range (4:1)
· High efficiency, low no-load power consumption
· Isolation voltage: 3000VDC / 6000VDC / 5000VAC
· Protection features: Input undervoltage, output short circuit/overcurrent/overvoltage protection
· Operating temperature range: -40°C to +105°C
· Design compliance: UL62368/EN62368/BS EN62368/EN50155
· Standard international pin configuration, DIP standard package

Product Series	Output Power/Current	Output Range (VDC)	Output Voltage (VDC)	Isolation Voltage (VDC)	Dimensions (Length * Width * Height mm)
XUF06-xxxxP	6W	24 (9~36) 48 (18~75)	3.3, 5, 9, 12, 15, 24	3000	31.6*20.3*10.2
XUE06-xxxxP	6W	24 (9~36) 48 (18~75)	±5, ±9, ±12, ±15, ±24	3000	31.6*20.3*10.2
XUH06-xxxxP	6W	24 (9~36) 48 (18~75)	5, 9, 12, 15, 24	6000	31.6*20.3*10.2
XUF10-xxxxLP	10W	24 (9~36) 48 (18~75)	33, 5, 9, 12, 15, 24	3000	51.5*26.5*15.6
XUE10-xxxxLP	10W	24 (9~36) 48 (18~75)	±5, ±12, ±15	3000	51.5*26.5*15.6
XUF20-xxxxLP	20W	24 (9~36) 48 (18~75)	3.3, 5, 9, 12, 15, 18, 24	3000	51.5*26.5*15.6
XUH20-xxxxLP	20W	24 (9~36) 48 (18~75)	3.3, 5, 12, 15, 24	6000	51.5*26.5*15.6

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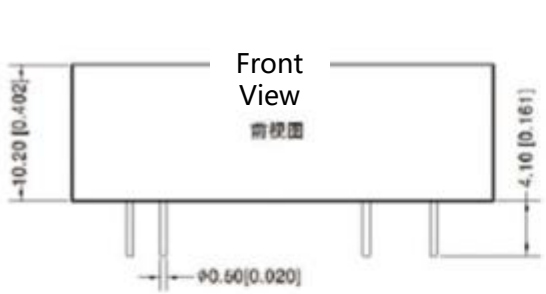
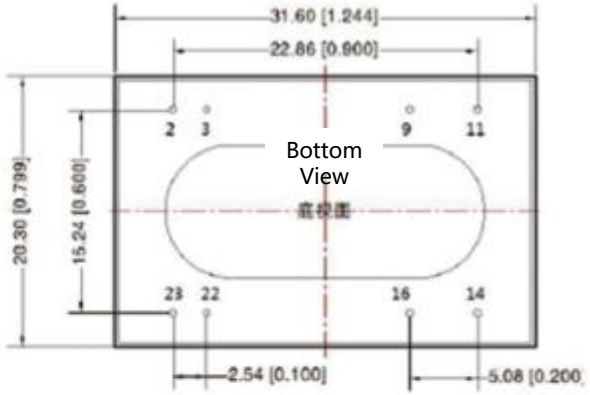
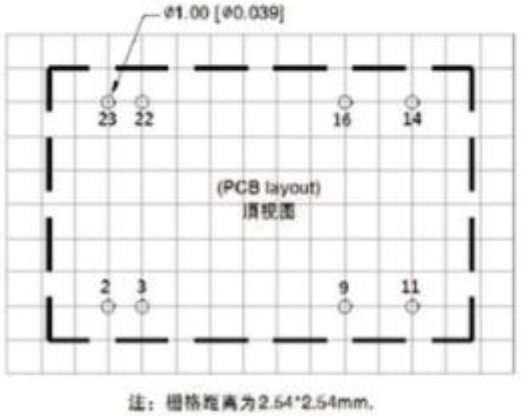
Package Dimensions





Top View



Note: Grid Distance is 2.54*2.54mm

Pin	Single-channel	Dual-channel
2,3	GND	GND
9	No Pin	0V
11	NC	-Vo
14	+Vo	+Vo
16	0V	0V
22,23	Vin	Vin

Notes:
- Dimension units: mm (inch)
- Terminal cross-section tolerance: ±0.10 (±0.004)
- Unmarked tolerances: ±0.25(±0.010)

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Special Application Type

Railway Dedicated: XUF-1D Series

· Ultra-wide input voltage range (4:1)
· Isolation voltage: 3000VDC / 1500VAC
· Operating temperature range: -40°C to +85°C
· Protection features: Input undervoltage, output short circuit/ overcurrent/overvoltage protection, over-temperature protection
· Low ripple and noise
· Radiated emissions meet: CLSPR32/EN55032 Class A
· Design compliance: EN50155/EN60950/UL62368/IEC62368

High Voltage Power Supply: XH0 Series

· No-load current as low as 25mA
· Operating temperature range: -40°C to +85°C
· Efficiency up to 90%
· Output voltage continuously adjustable from 0 to 1000V
· Built-in voltage and current monitoring signals

Product Series	Output Power/Current	Output Range (VDC)	Output Voltage (VDC)	Isolation Voltage (VDC)	Dimensions (Length * Width * Height mm)
XUF1D06-xxMD	6W	110 (40~160)	5, 12, 15, 24	3000	25.4*25.4*11.7
XUF1D10-xxLD	10W	110 (40~160)	3.3, 5, 12, 15, 24	3000	50.8*25.4*11.8
XUF1D15-xxLD	15W	110 (40~160)	3.3, 5, 12, 15, 24	3000	50.8*25.4*11.8
XUF1D20-xxLD	20W	110 (40~160)	3.3, 5, 12, 15, 24	3000	50.8*25.4*11.8
XHO04-P102	4mA	24(21.6-26.4)	1000	——	62.0*45.0*22.5
XHO08-P102	8mA	24(21.6-26.4)	1010	——	62.0*45.0*22.5
XHO10-P102	10mA	24(21.6-26.4)	1000	——	62.0*45.0*22.5
XHO30-P102	30mA	24(21.6-26.4)	1000	_	62.0*45.0*22.5

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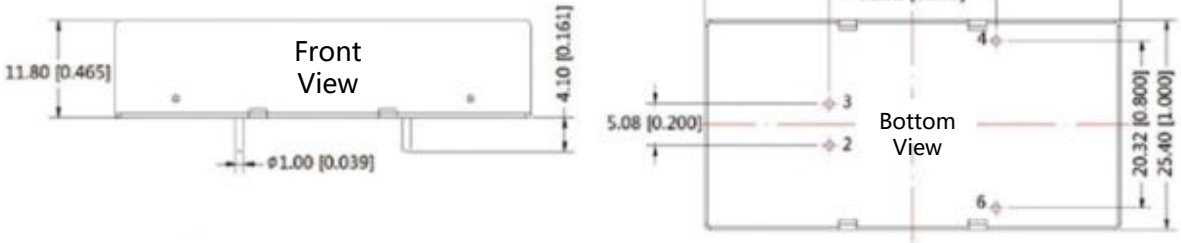
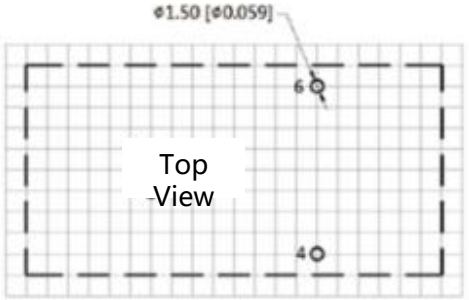
Package Dimensions

(1)

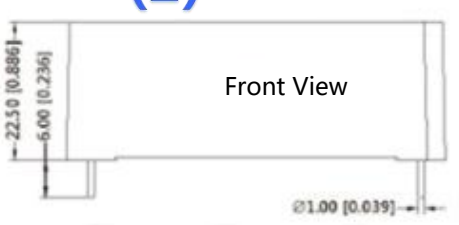


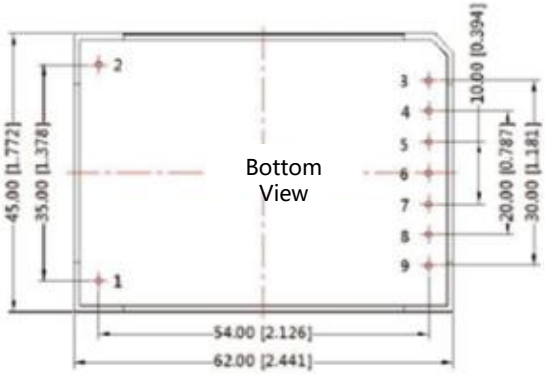


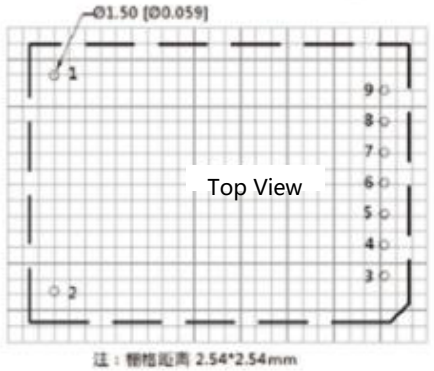
Pin	Function
2	GND
3	Vin
4	+Vo
6	0V

Note: Grid Distanceis 2.54*2.54mm

(2)







Note: Grid Distance is 2.54*2.54mm

Pin	Function
1	HGND
2	HV
3	Vin
4	GND
5	GND1
6	Adj
7	Vref
8	Idis
9	Vdis

Notes:
- Dimension units: mm (inch)
- Terminal cross-section tolerance: ±0.10 (±0.004)
- Unmarked tolerances: ±0.25(±0.010)

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Special Application Type

Wide Input Voltage Range, Ultra-Thin Type

· Ultra-wide input voltage range (4:1)
· High efficiency, low no-load power consumption
· Isolation voltage: 1500VDC

Wide Input Voltage Range, Surface Mount Type

· Protection features: Input undervoltage, output short circuit/overcurrent protection
· Operating temperature range: -40°C to +85°C
· Design compliance: UL62368/EN62368/BS EN62368
· Surface mount package

Product Series	Output Power/Current	Output Range (VDC)	Output Voltage (VDC)	Isolation Voltage (VDC)	Dimensions (Length * Width * Height mm)
XEUB03-xxxxT	3W	24 (9~36)	5, 12, 15, 24	1500	20*16.7*6.2
XEUB06-xxxxMD	6W	24 (9~36) 48 (18~75)	3.3, 5, 9, 12, 15, 24	1500	25.4*25.4*11.7
XEVB10-xxxxMD	10W	5 (4.5~9) 12 (9~18) 24 (18~36) 48 (36~48)	3.3, 5, 12, 15, 24	1500	25.4*25.4*11.7
XUB10-xxxxJD	10W	24 (9~36)	5, 6, 12, 15, 24	1500	39.2*20.8*6.1

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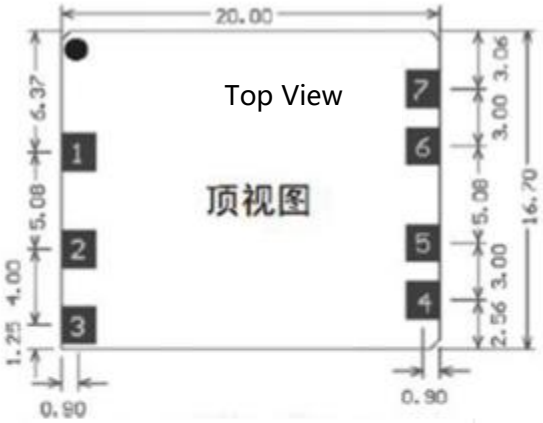
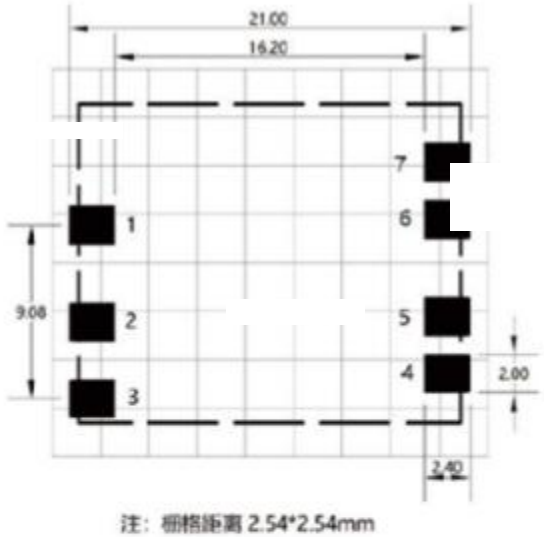
Package Dimensions

(Suitable for XEUB03-xxxxxT)



Function



Note: Grid Distance is 2.54*2.54mm

Function	
1	GND
2	Vin
3	Vin
4	+Vo
5	+Vo
6	0V
7	0V

Notes:
- Dimension units: mm
- Terminal cross-section tolerance: ±0.5mm
- Unmarked tolerances: 6.2 ± 0.5mm

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Non-Isolated DC-DC Power Supply

· Ultra-wide Input Voltage Range, Supporting 4.75VDC to 36VDC
· Ultra-high efficiency, low no-load power consumption
· Supports negative voltage output
· Output short circuit protection
· Operating temperature range: -40°C to +85°C
· Standard international pin configuration, ultra-compact size

Product Series	Output Power/Current	Output Range (VDC)	Output Voltage (VDC)	Isolation Voltage (VDC)	Dimensions (Length * Width * Height mm)
K78xx-500	500mA	12 (7~31) 24 (4.75~36)	3.3, 5, 9, 12, 15	——	11.6*7.55*10.16
K78xx-1000	1000mA	12 (8~28) 24 (6~36)	3.3, 5, 9, 12, 15	——	11.5*9.0*17.5
K78xx-1500	1500mA	12 (8~30) 24 (6~36)	3.3, 5, 9, 12, 15	——	11.5*9.0*17.5
K78xx-2000	2000mA	12 (8~32) 24 (4.5~36)	3.3, 5, 9, 12, 15	——	11.5*9.0*17.5

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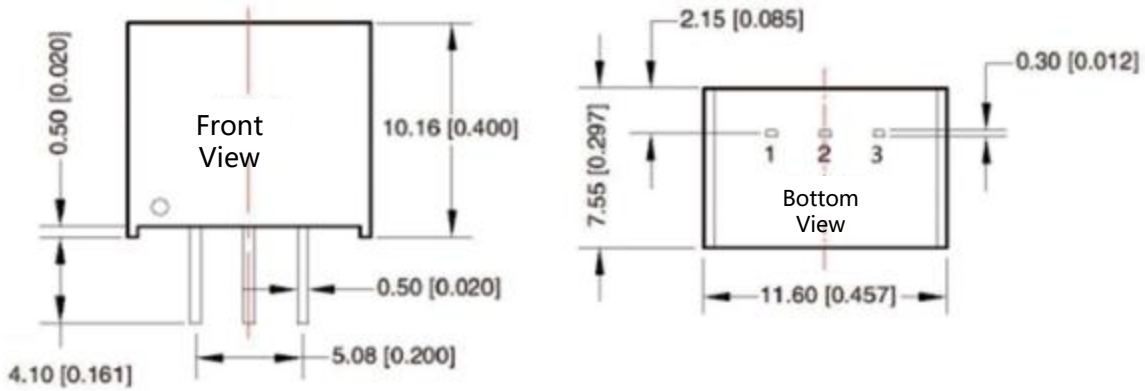
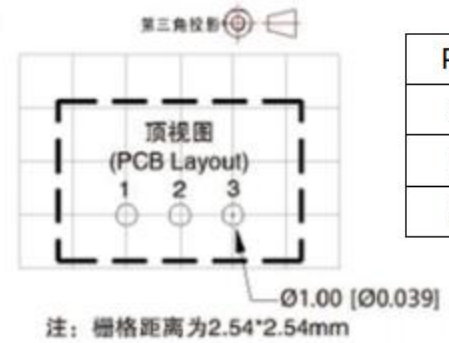
Package Dimensions

(1)



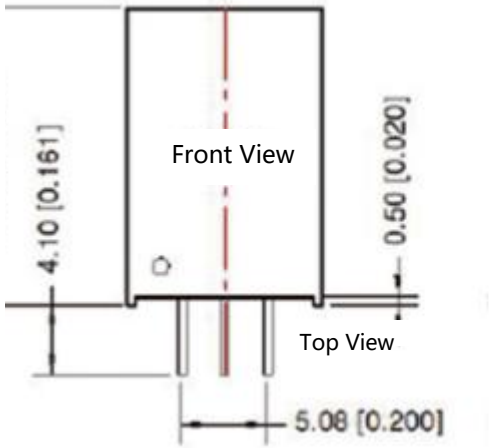
Top
View

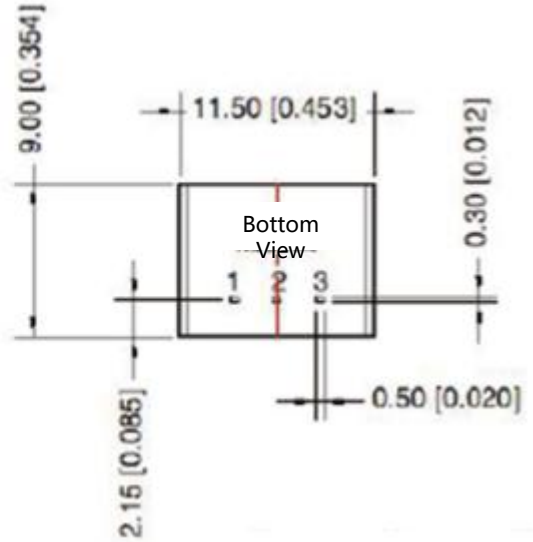


Pin	Positive Output	Negative Outputs
1	Vin	Vin
2	GND	-Vo
3	+Vo	GND

Note: Grid Distance is 2.54*2.54mm

(2)





Notes:
- Dimension units: mm (inch)
- Terminal cross-section tolerance: ±0.10 (±0.004)
- Unmarked tolerances: ±0.25(±0.010)

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