



EAC **CE** **UKCA**
TPTC004



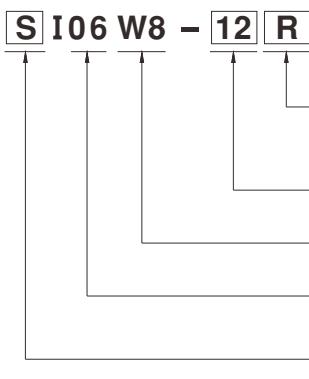
■ Features

- DIP 1"x1" package with industry standard pinout
- 8:1 ultrawide input range
- Operating temperature range -40 ~ +90°C
- No minimum load required
- Comply to BS EN/EN55032 radiated Class A without additional components
- High efficiency up to 86%
- Protections: Short circuit (Continuous) / Overload / Over voltage / Input under voltage
- 3KVDC I/O isolation
- Remote ON/OFF control (optional)
- 3 years warranty

■ Description

SI06W8 and DI06W8 series are 6W isolated and regulated module type DC-DC converter with DIP 1"x1" package. It features international standard pins, a high efficiency up to 86%, wide working temperature range -40~+90°C, 3KVDC I/P-O/P isolation voltage, compliance to BS EN/EN55032 radiated Class A without additional components, continuous-mode short circuit, overload, Input under voltage protection etc. The models account input voltage 9~75V 8:1 ultrawide input range, and various output voltage, 3.3V/5V/9V/12V/15V/24V for single output and ±5V/±12V/±15V for dual outputs, which are suitable for all kinds of systems, Such as industrial control, telecommunication field, distributed power architecture, and so on.

■ Model Encoding



■ Applications

- Telecom/datacom system
- Wireless network
- Industrial control facility
- Instrument
- Analyzer
- Detector
- Data switch

■ GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>



6W 1"x1" Package 8:1 Ultra-Wide Input DC-DC Regulated Converter **SI06W8 & DI06W8** series

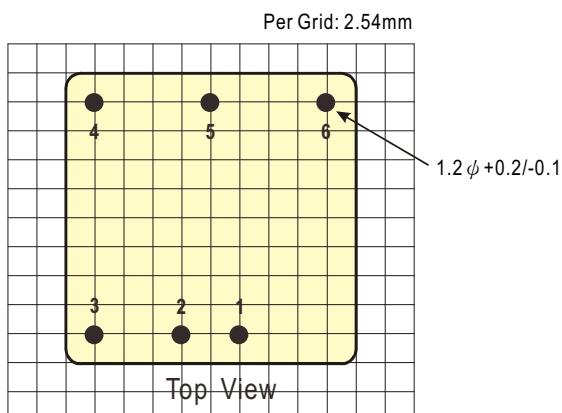
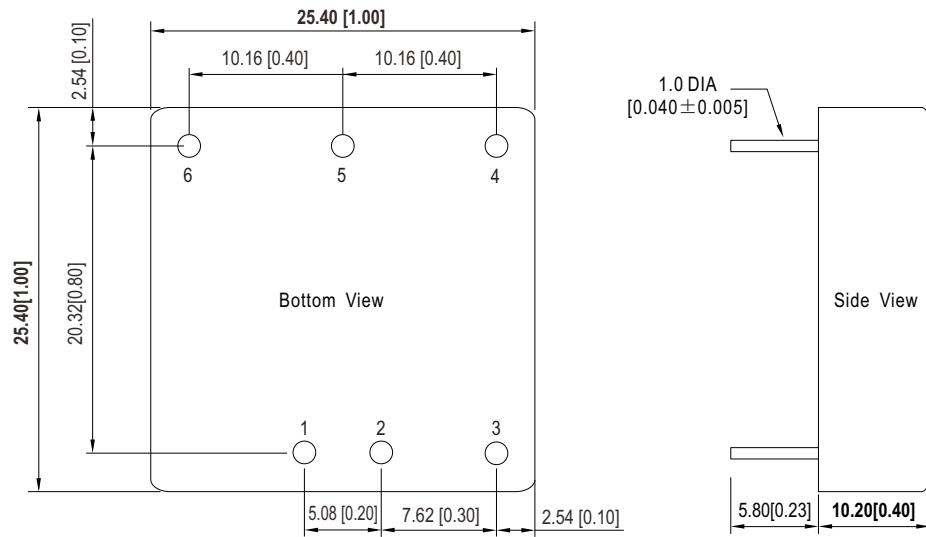
MODEL SELECTION TABLE									
ORDER NO.	INPUT			OUTPUT		EFFICIENCY (TYP.)	CAPACITOR LOAD (MAX.)		
	INPUT VOLTAGE (RANGE)	INPUT CURRENT		OUTPUT VOLTAGE	OUTPUT CURRENT				
		NO LOAD	FULL LOAD						
SI06W8-03	Normal 12V,24V,36V,48V,72V (9 ~ 75V)	5mA	268mA	3.3V	0~1500mA	80%	1800μF		
SI06W8-05		5mA	309mA	5V	0~1200mA	81%	1000μF		
SI06W8-09		7mA	301mA	9V	0~667mA	82.5%	680μF		
SI06W8-12		7mA	300mA	12V	0~500mA	85%	470μF		
SI06W8-15		8mA	294mA	15V	0~400mA	86%	220μF		
SI06W8-24		8mA	294mA	24V	0~250mA	85%	220μF		
DI06W8-05		7mA	309mA	±5V	±0~600mA	81%	*470μF		
DI06W8-12		9mA	295mA	±12V	±0~250mA	85%	*100μF		
DI06W8-15		11mA	300mA	±15V	±0~200mA	84.5%	*100μF		

* For each output

SPECIFICATION			
INPUT	VOLTAGE RANGE	9 ~ 75Vdc	
	SURGE VOLTAGE (100ms max.)	100Vdc	
	FILTER	Capacitor network	
	PROTECTION	Fuse recommended. 2A Slow-Blow Type	
OUTPUT	VOLTAGE ACCURACY	±2%	
	RATED POWER	6W	
	RIPPLE & NOISE Note.2	100mVp-p	
	LINE REGULATION Note.3	±0.2% (±0.5% for 3.3V0)	
PROTECTION	LOAD REGULATION Note.4	±0.5%	
	SWITCHING FREQUENCY (Typ.)	300KHz (PWM)	
	SHORT CIRCUIT	Protection type : Continuous, automatic recovery	
	OVERLOAD	110 ~ 230% rated output power	
FUNCTION	OVER VOLTAGE	Protection type : Recovers automatically after fault condition is removed	
	UNDER VOLTAGE LOCKOUT	Start-up voltage	8.8V
		Shutdown voltage	8.5V
	REMOTE CONTROL (OPTIONAL)	Power ON: RC ~ -Vin > 2.5Vdc ~ 6Vdc or open circuit Power OFF: RC ~ -Vin < 1Vdc or short	
ENVIRONMENT	COOLING	Free-air convection	
	WORKING TEMP.	-40 ~ +90°C (Refer to "Derating Curve")	
	CASE TEMPERATURE	+105°C max.	
	WORKING HUMIDITY	5% ~ 95% RH non-condensing	
	STORAGE TEMP., HUMIDITY	-55 ~ +125°C, 10 ~ 95% RH non-condensing	
	TEMP. COEFFICIENT	±0.05% / °C (0 ~ 71°C)	
	SOLDERING TEMPERATURE	1.5mm from case of 1 ~ 3sec./260°C max.	
SAFETY & EMC (Note.5)	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes	
	SAFETY STANDARDS	EAC TP TC 004 approved	
	WITHSTAND VOLTAGE	I/P-O/P:3KVDC	
	ISOLATION RESISTANCE	I/P-O/P:1000M Ohms / 500VDC / 25°C / 70% RH	
	ISOLATION CAPACITANCE (Typ.)	1000pF	
	EMC EMISSION	Parameter	Standard
		Conducted	BS EN/EN55032(CISPR32)
		Radiated	BS EN/EN55032(CISPR32) Class A without external components Class B with external components
	EMC IMMUNITY	Parameter	Standard
		ESD	BS EN/EN61000-4-2 contact ±4KV
		Radiated Susceptibility	BS EN/EN61000-4-3 3V/m
		EFT/Burst	BS EN/EN61000-4-4 ±0.5KV
		Surge	BS EN/EN61000-4-5 Line-Line ±0.5KV
		Conducted	BS EN/EN61000-4-6 3Vrms
		Magnetic field immunity	BS EN/EN61000-4-8 1A/m
OTHERS	MTBF	>400Khrs MIL-HDBK-217F(25°C)	
	DIMENSION (L*W*H)	25.4*25.4*10.2mm (1*1*0.401 inch)	
	CASE MATERIAL	Black coated copper with non-conductive base	
	PACKING	20g; 10pcs/per tube, 600pcs/60 tube/per carton	
NOTE	1. All parameters are specified at normal input(24Vdc), rated load, 25°C 70% RH ambient. 2. Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1μF & 47μF capacitor. 3. Line regulation is measured from low line to high line at rated load. 4. Load regulation is measured from 0% to 100% rated load. 5. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com) ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx		

■ Mechanical Specification

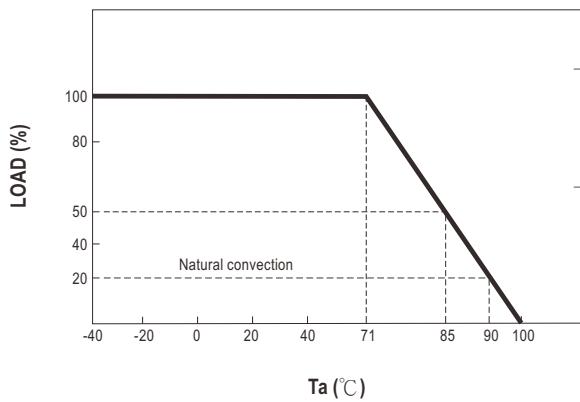
- All dimensions in mm(inch)
- Tolerance: x.x or x.xx ± 0.5 mm(0.019 inch)
- Pin size is 1 ± 0.1 mm (0.04" ± 0.004 ")



■ Plug Assignment

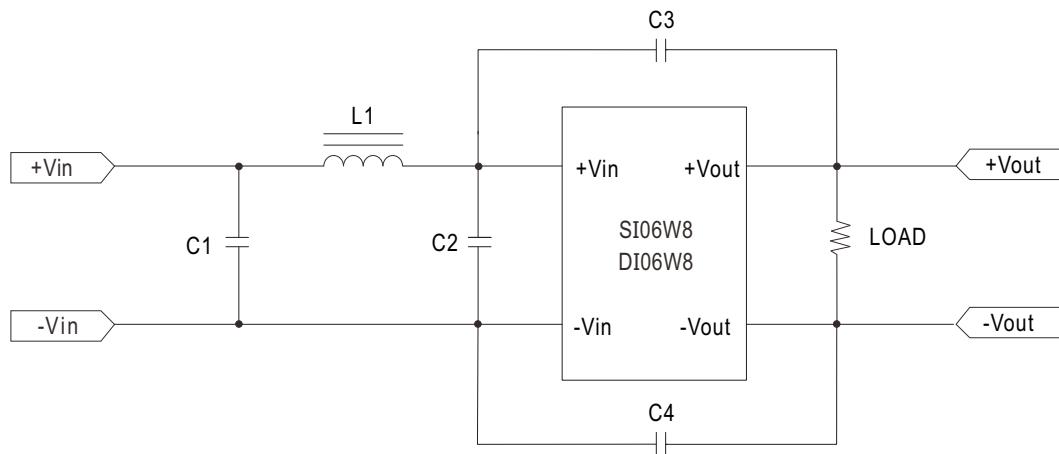
Pin-Out		
Pin No.	SI06W8 (Single output)	DI06W8 (Dual output)
1	+Vin	+Vin
2	-Vin	-Vin
3	N.P(Standard) ; R.C (Optional)	
4	-Vout	-Vout
5	N.P	Common
6	+Vout	+Vout

■ Derating Curve



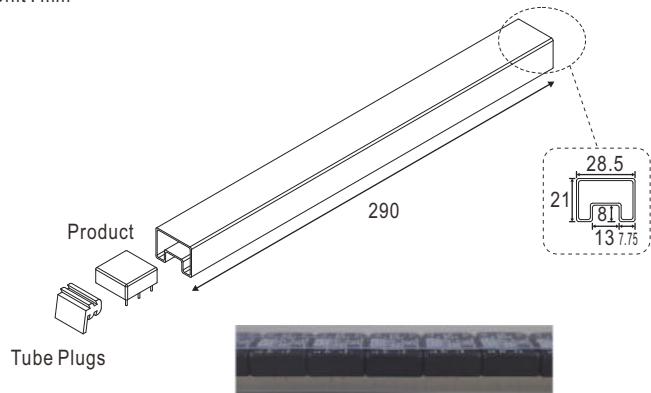
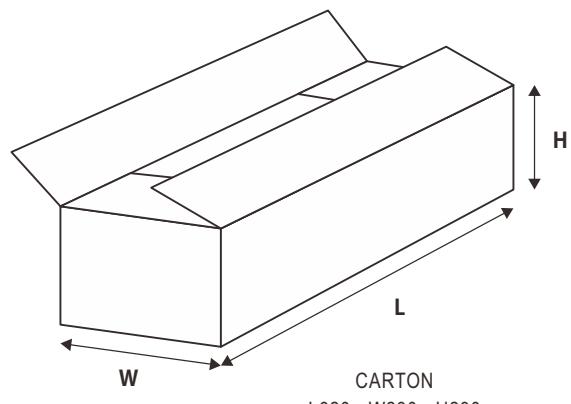
■ EMC Suggest Circuit

* Required external components to meet BS EN/EN55032 radiated Class B emission as below:



Model No.	C1	C2	C3	C4	L1
SI06W8 DI06W8	2.2μF/100V	2.2μF/100V	152pF/5KV	152pF/5KV	10μH Common Choke

■ Packing

Standard Tube Packing	MPQ Per Tube (PCS)	One Tube G.W.	Max. Q'TY/ Carton(PCS)	One Carton G.W.
Unit : mm  Product Tube Plugs  Tube pattern				
 CARTON L620 x W230 x H230	10	243g	600	15.38Kg

■ Installation Manual

Please refer to : <http://www.meanwell.com/manual.html>