



6W 1"x1" Package 8:1 Ultra-Wide Input DC-DC Regulated Converter

SI06W8 & DI06W8 series



■ 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

■ Applications

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

■ GTIN CODE

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

■ 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 $\pm 5V/\pm 12V/\pm 15V$ 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

S I06 W8 - 12 R

- Blank: Non-Remote control (Standard model)
R: Built-in Remote control (Optional model)
- Output voltage (3.3/5/9/12/15/24Vdc, $\pm 5/\pm 12/\pm 15Vdc$)
- 8:1 Ultra wide input voltage (9~75Vdc)
- Rated wattage
- Series name { S:Single output
D: Dual output



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

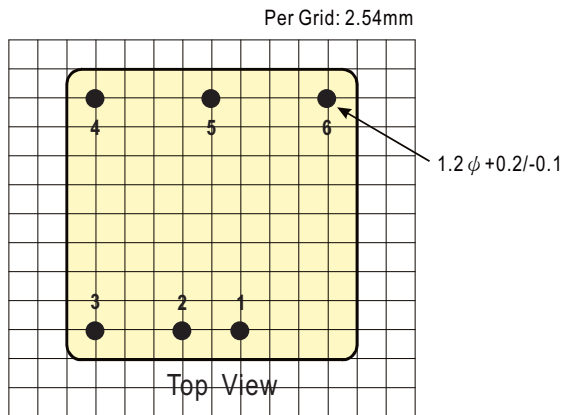
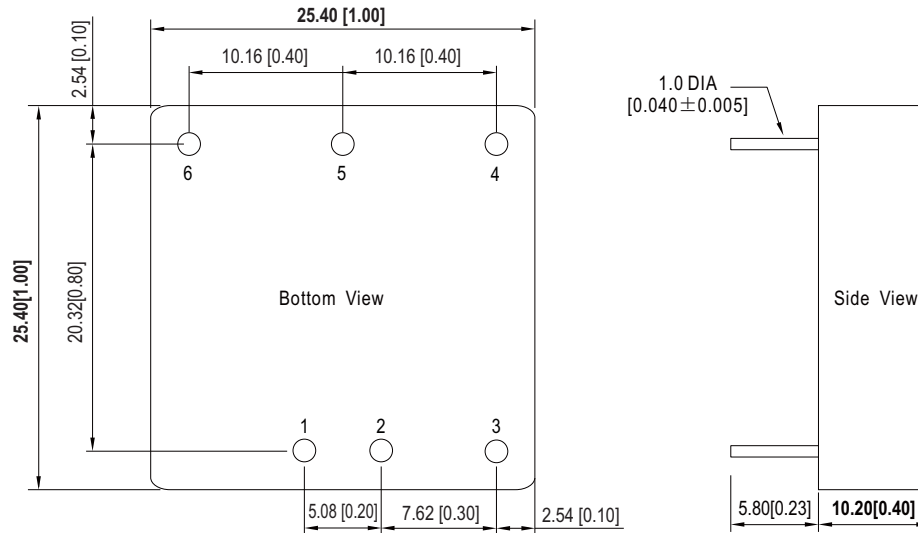
MODEL SELECTION TABLE							
ORDER NO.	INPUT			OUTPUT		EFFICIENCY (TYP.)	CAPACITOR LOAD (MAX.)
	INPUT VOLTAGE (RANGE)	INPUT CURRENT		OUTPUT VOLTAGE	OUTPUT CURRENT		
		NO LOAD	FULL LOAD				
SI06W8-03	Normal 12V,24V,36V,48V,72V (9 ~ 75V)	5mA	268mA	3.3V	0~1500mA	80%	1800μF
SI06W8-05		5mA	309mA	5V	0~1200mA	83%	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 3.3Vo)		
	LOAD REGULATION Note.4	± 0.5%		
	SWITCHING FREQUENCY (Typ.)	300KHz (PWM)		
PROTECTION	SHORT CIRCUIT	Protection type : Continuous, automatic recovery		
	OVERLOAD	110 ~ 230% rated output power		
		Protection type : Recovers automatically after fault condition is removed		
	OVER VOLTAGE	Protection type : Clamp by TVS diode		
	UNDER VOLTAGE LOCKOUT	Start-up voltage	8.8V	
Shutdown voltage		8.5V		
FUNCTION	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℃ (Refer to "Derating Curve")		
	CASE TEMPERATURE	+105℃ max.		
	WORKING HUMIDITY	5% ~ 95% RH non-condensing		
	STORAGE TEMP., HUMIDITY	-55 ~ +125℃, 10 ~ 95% RH non-condensing		
	TEMP. COEFFICIENT	±0.05% / °C (0 ~ 71℃)		
	SOLDERING TEMPERATURE	1.5mm from case of 1 ~ 3sec./260℃ max.		
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes		
SAFETY & EMC (Note.5)	SAFETY STANDARDS	EAC TP TC 004 approved		
	WITHSTAND VOLTAGE	I/P-O/P:3KVDC		
	ISOLATION RESISTANCE	I/P-O/P:1000M Ohms / 500VDC / 25℃ / 70% RH		
	ISOLATION CAPACITANCE (Typ.)	1000pF		
	EMC EMISSION	Parameter	Standard	Test Level / Note
		Conducted	BS EN/EN55032(CISPR32)	N/A
		Radiated	BS EN/EN55032(CISPR32)	Class A without external components Class B with external components
	EMC IMMUNITY	Parameter	Standard	Test Level / Note
		ESD	BS EN/EN61000-4-2	contact ±4KV
		Radiated Susceptibility	BS EN/EN61000-4-3	3V/m
		EFT/Burest	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℃)	
	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℃ 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-confirm that it still meet 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

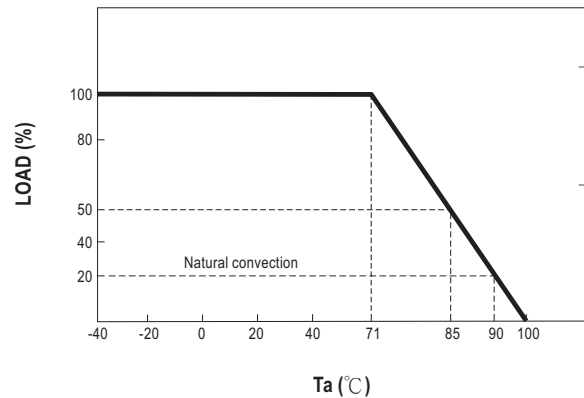
- All dimensions in mm(inch)
- Tolerance: x.x or x.xx $\pm 0.5\text{mm}$ (0.019 inch)
- Pin size is $1 \pm 0.1\text{mm}$ (0.04 ± 0.004 ")



Plug Assignment

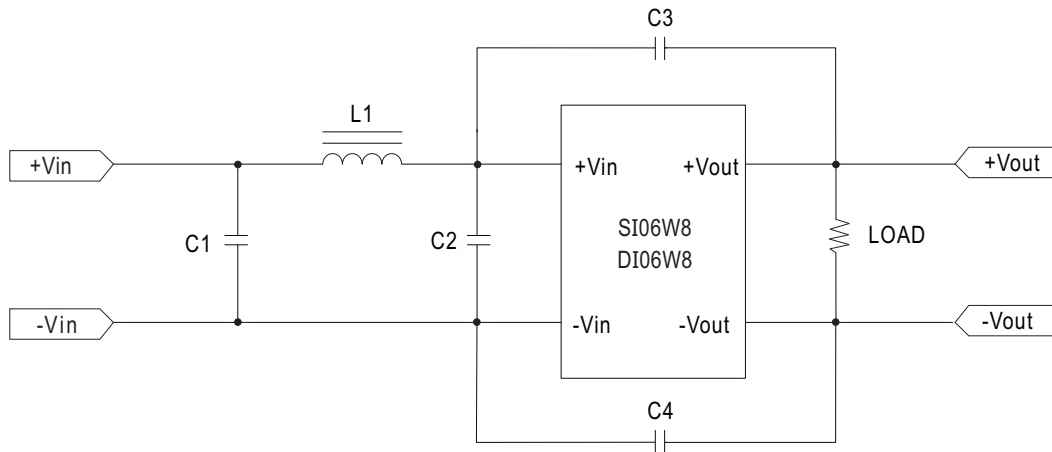
Pin-Out		
Pin No.	SI06W8 (Single output)	DI06W8 (Dual output)
1	+Vin	+Vin
2	-Vin	-Vin
3	N.P(Standard) ; R.C (Optional)	
4	-Vout	-Vout
5	N.P	Common
6	+Vout	+Vout

Derating Curve



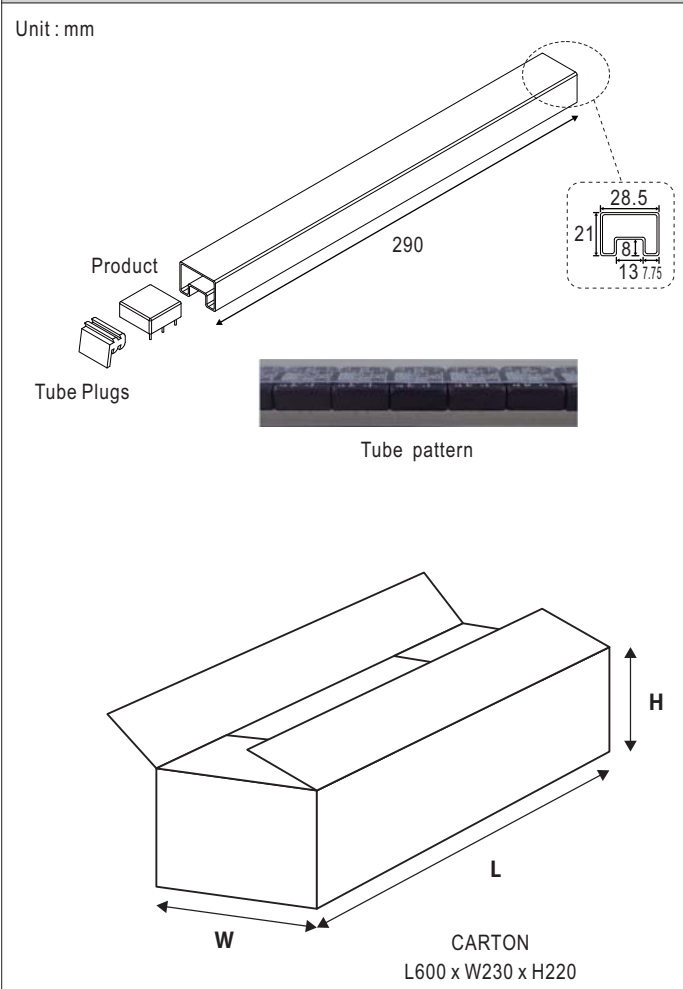
■ EMC Suggest Circuit

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



Model No.	C1	C2	C3	C4	L1
SI06W8 DI06W8	2.2 μ F/100V	2.2 μ F/100V	152pF/5KV	152pF/5KV	10 μ H 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 L600 x W230 x H220	10	243g	600	15.4Kg

■ Installation Manual

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