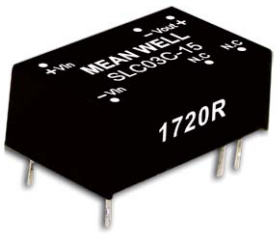
3W DIP Package DC-DC Regulated Converter **SLC03 & DLC03 series**







Features

- DIP16 package with industry standard pinout
- 2:1 wide input range
- Operating temperature range -40 ~ +85℃
- No minimum load required
- Comply to BS EN/EN55032 radiated Class B without additional components
- High efficiency up to 82%
- Protections: Short circuit (Continuous) / Overload / Input under voltage
- 1.5KVDC I/O isolation
- 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

SLC03 and DLC03 series are 3W isolated and regulated module type DC-DC converter with DIP16 package. It features international standard pins, a high efficiency up to 82%, wide working temperature range -40~+85℃, 1.5KVDC I/P-O/P isolation voltage, the compliance to BS EN/EN55032 radiated Class B without additional components, continuous-mode short circuit protection, etc. The models account for different input voltage, 9~18V, 18~36V and 36~75V 2:1 wide input range, and various output voltage, 5V/12V/15V 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

SLC03A–12

- 12 — Output voltage (5/12/15Vdc，±5/±12/±15Vdc)
- A — Input voltage (A: 9~18Vdc，B: 18~36Vdc，C: 36~75Vdc)
- 03 — Rated wattage
- SLC — Series name { S:Single output / D:Dual output

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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				
SLC03A-05	12V (9 ~ 18V)	25mA	330mA	5V	600mA	79%	1000μF
SLC03A-12		15mA	320mA	12V	250mA	81%	470μF
SLC03A-15		15mA	309mA	15V	200mA	81%	330μF
DLC03A-05		30mA	325mA	±5V	±0 ~ 300mA	79%	* 220μF
DLC03A-12		32mA	305mA	±12V	±0 ~ 125mA	82%	*220μF
DLC03A-15		32mA	313mA	±15V	±0 ~ 100mA	81%	*220μF
SLC03B-05	24V (18 ~ 36V)	10mA	154mA	5V	600mA	81%	1000μF
SLC03B-12		10mA	154mA	12V	250mA	82%	470μF
SLC03B-15		10mA	153mA	15V	200mA	82%	330μF
DLC03B-05		20mA	158mA	±5V	±0 ~ 300mA	79%	*220μF
DLC03B-12		20mA	156mA	±12V	±0 ~ 125mA	81%	*220μF
DLC03B-15		20mA	156mA	±15V	±0 ~ 100mA	80%	*220μF
SLC03C-05	48V (36 ~ 75V)	7mA	77mA	5V	600mA	81%	1000μF
SLC03C-12		7mA	76mA	12V	250mA	82%	470μF
SLC03C-15		7mA	76mA	15V	200mA	82%	330μF
DLC03C-05		10mA	79mA	±5V	±0 ~ 300mA	80%	*220μF
DLC03C-12		10mA	78mA	±12V	±0 ~ 125mA	80%	*220μF
DLC03C-15		10mA	78mA	±15V	±0 ~ 100mA	80%	*220μF

* For each output

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SPECIFICATION				
INPUT	VOLTAGE RANGE	A: 9~18Vdc , B: 18~36Vdc , C: 18~75Vdc		
	SURGE VOLTAGE (100ms max.)	12Vin models : 25Vdc ; 24Vin models : 50V ; 48Vin models : 100Vdc		
	FILTER	Internal capacitor		
	PROTECTION	Fuse recommended. 12Vin models: 1A Slow-Blow Type, 24Vin models: 0.5A Slow-Blow Type, 48Vin models: 200mA Slow-Blow Type		
	INTERNAL POWER DISSIPATION	1000mW		
OUTPUT	VOLTAGE ACCURACY	±2%		
	RATED POWER	3W		
	RIPPLE & NOISE Note.2	50mVp-p		
	LINE REGULATION Note.3	±0.2%		
	LOAD REGULATION Note.4	±0.5%		
	SWITCHING FREQUENCY (Typ.)	100KHz		
PROTECTION	SHORT CIRCUIT	Protection type : Continuous, automatic recovery		
	OVERLOAD	150 ~ 250% rated output power		
		Protection type : Recovers automatically after fault condition is removed		
	UNDER VOLTAGE LOCKOUT	Start-up voltage	12Vin: 8.8Vdc, 24Vin: 17Vdc, 48Vin: 34Vdc	
		Shutdown voltage	12Vin: 7Vdc, 24Vin: 14Vdc, 48Vin: 30Vdc	
ENVIRONMENT	COOLING	Free-air convection		
	WORKING TEMP.	-40 ~ +85℃ (Refer to "Derating Curve")		
	CASE TEMPERATURE	+100℃ max.		
	WORKING HUMIDITY	20% ~ 90% RH non-condensing		
	STORAGE TEMP., HUMIDITY	-40 ~ +105℃, 10 ~ 95% RH non-condensing		
	TEMP. COEFFICIENT	0.03% / ℃ (0 ~ 80℃)		
	SOLDERING TEMPERATURE	1.5mm from case of 3 ~ 5sec./265℃ 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 020/2011 (EAC TP TC 004 for 48Vin type only) approved		
	WITHSTAND VOLTAGE	I/P-O/P:1.5KVDC		
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25℃/ 70% RH		
	ISOLATION CAPACITANCE (Typ.)	80pF		
	EMC EMISSION	**Parameter**	**Standard**	**Test Level / Note(Note.6)**
		Conducted	BS EN/EN55032(CISPR32)	N/A
		Radiated	BS EN/EN55032(CISPR32)	Class B
	EMC IMMUNITY	**Parameter**	**Standard**	**Test Level / Note**
		ESD	BS EN/EN61000-4-2	Level 3, ±8KV air
		Radiated Susceptibility	BS EN/EN61000-4-3	Level 2, 3V/m
		EFT/Burest	BS EN/EN61000-4-4	Level 1, 0.5KV
		Surge	BS EN/EN61000-4-5	Level 2, 0.5KV Line-Line
		Conducted	BS EN/EN61000-4-6	Level 2, 3V
		Magnetic Field	BS EN/EN61000-4-8	Level 1, 1A/m
OTHERS	MTBF	300Khrs min. MIL-HDBK-217F(25℃)		
	DIMENSION (L*W*H)	22.1*13.8*8.55mm (0.87*0.54*0.34 inch)		
	CASE MATERIAL	Non-Conductive black plastic (UL 94V-0 rated)		
	PACKING	4.5g ; 36pcs/per tube, 1800pcs/50 tube/per carton		

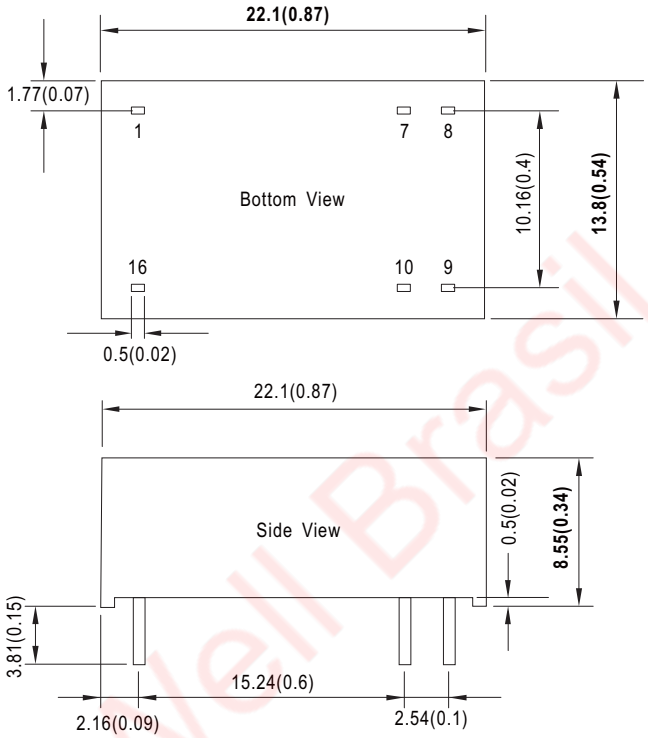
NOTE

1.All parameters are specified at normal input(A:12Vdc, B:24Vdc, C:48Vdc), 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 10% 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)
6.An external input filter capacitor is required if the module has to meet BS EN/EN61000-4-4, BS EN/EN61000-4-5. The filter capacitor Power Mate suggest: 220uF/100V.
※ Product Liability Disclaimer ： For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

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■ Mechanical Specification

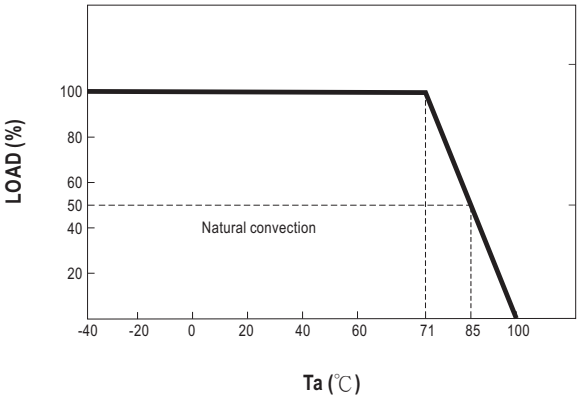
- All dimensions in mm(inch)
- Tolerance:x.x±0.5mm(x.xx±0.02")
  x.xx±0.25mm(x.xxx±0.01")
- Pin size is 0.50x0.30mm (0.02"x0.01")
- Pin is Tolerance:x.xx±0.07mm(x.xxx±0.03")



■ Plug Assignment

Pin-Out		
Pin No.	SLC03 (Single output)	DLC03 (Dual output)
1	-Vin	-Vin
7	N.C.	N.C.
8	N.C.	Common
9	+Vout	+Vout
10	-Vout	-Vout
16	+Vin	+Vin

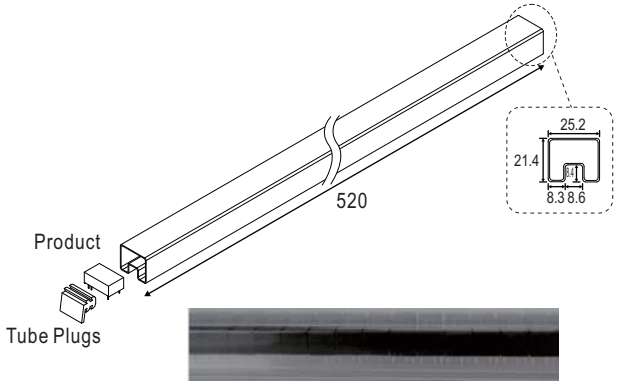
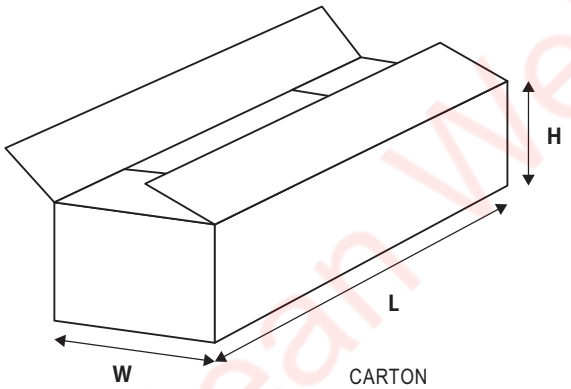
■ Derating Curve



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■ Packing

Standard Tube Packing	MPQ Per Tube (PCS)	One Tube G.W.	Max. Q'TY/ Carton(PCS)	One Carton G.W.
Unit : mm  Tube pattern  CARTON L600 x W230 x H220	36	220g	1800	11.8Kg

■ Installation Manual

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

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