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■ Features

- SMD package with industry standard pinout
- Operating temperature range -40 ~ +90°C
- Comply to EN55032 radiated Class B without additional components
- High efficiency up to 83%
- · Protection: Short circuit
- · 3KVDC I/O isolation
- · Low cost
- 3 years warranty











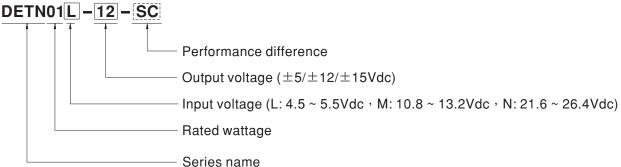
Applications

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

Description

DETN01 series is 1W isolated and unregulated module type DC-DC converter with SMD package. It features international standard pins, a high efficiency up to 83%, wide working temperature range -40~+90°C, 3KVDC I/P-O/P isolation voltage, compliance to EN55032 radiated Class B without additional components, short circuit protection, etc. The models account for different input voltage $5V/12V/24V\pm10\%$, and various output voltage, $\pm5V/\pm12V/\pm15V$ for Dual output which are suitable for all kinds of systems, Such as industrial control, telecommunication field, distributed power architecture, and so on.

■ Model Encoding



Type	Description	Note
Blank	-40~+90°C working temperature with max. 1 second short protection	In Stock
SC	-40~+105°C working temperature with continuous short protection	Optional



MODEL SELECTION TABLE							
ORDER NO.	INPUT		OUTPUT				
	INPUT VOLTAGE (RANGE)	INPUT CURRENT		OUTPUT	OUTPUT	EFFICIENCY (TYP.)	CAPACITOR LOAD (MAX.)
		NO LOAD	FULL LOAD	VOLTAGE	CURRENT	,	()
DETN01L-05	Normal 5V (4.5 ~ 5.5V)	30mA	260mA	±5V	±10~100mA	78%	220μF
DETN01L-12		28mA	257mA	±12V	±4.2 ~ 42mA	78%	220μF
DETN01L-15		28mA	253mA	±15V	±3.4 ~ 34mA	80%	220μF
DETN01M-05	Normal 12V (10.8 ~ 13.2V)	13mA	107mA	±5V	±10~100mA	82%	220μF
DETN01M-12		12mA	103mA	±12V	±4.2 ~ 42mA	82%	220μF
DETN01M-15		13mA	102mA	±15V	±3.4 ~ 34mA	83%	220μF
DETN01N-05	Normal 24V (21.6 ~ 26.4V)	11mA	55mA	±5V	±10~100mA	76%	220μF
DETN01N-12		11mA	55mA	±12V	±4.2 ~ 42mA	77%	220µF
DETN01N-15		11mA	55mA	±15V	±3.4 ~ 34mA	78%	220μF

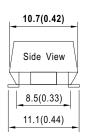


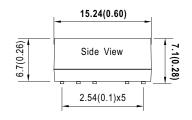
SPECIFICAT	ΓΙΟΝ						
		L: 4.5 ~ 5.5Vdc					
	VOLTAGE RANGE	M: 10.8 ~ 13.2Vdc					
,		N: 21.6 ~ 26.4Vdc					
		5Vin models : 9Vdc					
	SURGE VOLTAGE (100ms max.)	12Vin models : 16Vdc					
INPUT		24Vin models : 30Vdc					
• .	FILTER	Internal capacitor					
		Fuse recommended.					
	PROTECTION	5Vin models: 750mA Slow-Blow Type					
		12Vin models: 300mA Slow-Blow Type 24Vin models: 150mA Slow-Blow Type					
	INTERNAL POWER DISSIPATION	···					
	VOLTAGE ACCURACY	±2.0%					
	RATED POWER	1W					
	_						
OUTPUT		75mVp-p					
		1.2% for 1% input variation					
	LOAD REGULATION Note.4						
	SWITCHING FREQUENCY (Typ.)						
PROTECTION	SHORT CIRCUIT	Standard model: 0.5 second max. Optional models (SC-suffix): Continuous					
	COOLING	Free-air convection					
	WORKING TEMP.	Standard model: -40 ~ +90°C (Refer to "Derating Curve") ; Optional models (SC-suffix): -40 ~ +105°C					
	CASE TEMPERATURE	+100°C max.					
	WORKING HUMIDITY	20% ~ 90% RH non-condensing					
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-55 ~ +125°C, 10 ~ 95% RH non-condensing					
	TEMP. COEFFICIENT	0.03% / °C (0 ~ 85°C)					
	SOLDERING TEMPERATURE	1.5mm from case of 1 ~ 10sec./240°C max.					
	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:100M Ohms / 500VDC / 25°C / 70% RH					
	ISOLATION CAPACITANCE (Typ.)						
		Parameter	Standard	Test Level / Note(Note.6)			
	EMC EMISSION	Conducted	EN55032(CISPR32)	N/A			
SAFETY &		Radiated	EN55032(CISPR32)	Class B			
EMC		Parameter	Standard	Test Level / Note			
(Note.5,6)		ESD	EN61000-4-2	Level 3, ±8KV air			
,		Radiated Susceptibility	EN61000-4-3	Level 2, 3V/m			
		EFT/Burest	EN61000-4-4	Level 1, 0.5KV			
	EMC IMMUNITY	Surge	EN61000-4-5	Level 2, 0.5KV Line-Line			
		Conducted	EN61000-4-6	Level 2, 3V			
		Magnetic Field	EN61000-4-8	Level 1, 1A/m			
	MTBF	880Khrs min. MIL-HDBK-217F(25°C		200011, 170111			
OTHERS	DIMENSION (L*W*H)	15.24*10.7*7.1mm (0.6*0.42*0.28 inch)					
	CASE MATERIAL						
	PACKING	Non-Conductive black plastic (UL 94V-0 rated)					
NOTE		1.2g cified at normal input(L:5Vdc, M:12Vdc, N:24Vdc), rated load, 25°C 70% RH ambient.					
NOIE	2.Ripple & noise are mea 3.Line regulation is measu 4.Load regulation is measu 5.The final equipment murefer to "EMI testing of a continuous filter continuou	sured at 20MHz by using a 12" twis ured from low line to high line at rate ured from 10% to 100% rated load.	ted pair terminated with a 0.1 and load. C directives. For guidance on lable on http://www.meanwell.	μf & 47μf capacitor. how to perform these EMC tests, please com)			
				File Name: DETN01-SPEC 2018-01-			

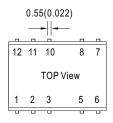


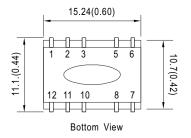
■ Mechanical Specification

- All dimensions in mm(inch)
- Tolerance:x.x±0.5mm(x.xx±0.02") $x.xx\pm0.25mm(x.xxx\pm0.01")$
- Pin size is 0.50x0.30mm (0.02" x0.01")
 Pin is Tolerance:x.xx±0.07mm(x.xxx±0.03")





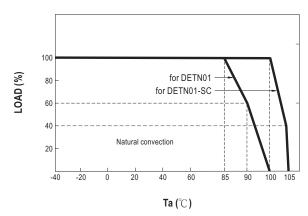




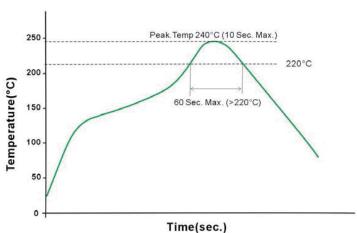
■ Plug Assignment

Pin No.	Pin-Out
1	-Vin
2	+Vin
5	Common
6	-Vout
8	+Vout
3,7,10,11,12	N.C.

■ Derating Curve



■ Reflow Soldering Curve



Remark: The curve applies only to the hot air reflow soldering.

■ Installation Manual

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