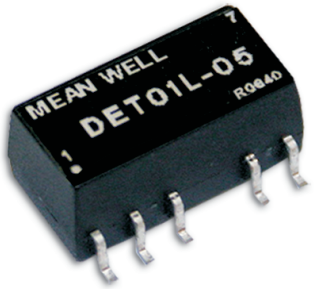
1W DC-DC Unregulated Dual Output Converter

DET01 series



Features :

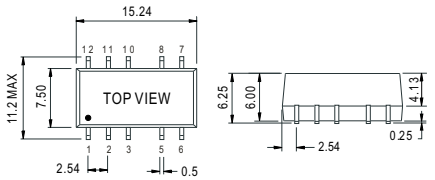
- 3000VDC I/O isolation
- Internal SMD technology
- Protection: Short circuit
- Cooling by free air convection
- Non-conductive plastic case
- SMD package styles
- 100% full load burn-in test
- Low cost / High reliability
- Approved: UL / CUL
- 1 year warranty

SPECIFICATION

ORDER NO.			DET01L-05	DET01M-05	DET01L-09	DET01M-09	DET01L-12	DET01M-12	DET01L-15	DET01M-15
OUTPUT	DC OUTPUT VOLTAGE		±5V		±9V		±12V		±15V	
	OUTPUT CURRENT RANGE		±100mA		±56mA		±42mA		±33mA	
	EFFICIENCY		72%	71%	75%	73%	78%	74%	79%	75%
	RATED POWER		1W							
	RIPPLE & NOISE (max.) Note.2		100mVp-p							
	LINE REGULATION Note.3		±1.2% for 1% input variation							
	LOAD REGULATION Note.4		±8.0%							
	VOLTAGE TOLERANCE		±8.0%							
	SWITCHING FREQUENCY(Typ.)		100KHz							
INPUT	VOLTAGE RANGE		4.5 ~ 5.5V	10.8 ~ 13.2V	4.5 ~ 5.5V	10.8 ~ 13.2V	4.5 ~ 5.5V	10.8 ~ 13.2V	4.5 ~ 5.5V	10.8 ~ 13.2V
	NORMAL VOLTAGE		5V	12V	5V	12V	5V	12V	5V	12V
	INPUT CURRENT	Full load	280mA	122mA	280mA	122mA	280mA	122mA	280mA	122mA
		No load	29mA	18mA	29mA	18mA	29mA	18mA	29mA	29mA
	PROTECTION		Fuse recommended							
PROTECTION	OVERLOAD		Momentary							
			Protection type : Broken							
	SHORT CIRCUIT		Momentary							
			Protection type : Broken							
ENVIRONMENT	WORKING TEMP.		-40 ~ +85℃ (Refer to output load derating curve)							
	WORKING HUMIDITY		20% ~ 90% RH non-condensing							
	STORAGE TEMP., HUMIDITY		-40 ~ +105℃, 10 ~ 95% RH							
	TEMP. COEFFICIENT		±0.03% / ℃ (0 ~ 50℃)							
	VIBRATION		10 ~ 500Hz, 2G 10min./1 cycle, period for 60min. each along X, Y, Z axes							
SAFETY & EMC	SAFETY STANDARDS		UL60950-1, CSA C22.2							
	WITHSTAND VOLTAGE		I/P-O/P:3KVDC							
	ISOLATION RESISTANCE		I/P-O/P: 100M Ohms / 500VDC / 25℃ / 70% RH							
OTHERS	MTBF		500khrs min. MIL-HDBK-217F(25℃)							
	DIMENSION		15.24*7.5*6.0mm or 0.60"*0.30"*0.24" inch (L*W*H)							
	WEIGHT		1.7g							

Mechanical Specification

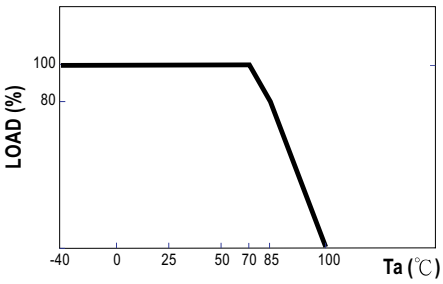
Unit: mm (inch)



Pin Configuration

Pin No.	Output
1	-Vin
2	+Vin
3	NC
5	COM
6	-Vout
7	NC
8	+Vout
10	NC
11	NC
12	NC

Derating Curve



NOTE	
	1.All parameters are specified at normal input, rated load, 25℃ 70% RH. Ambient. 2.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor. 3.Line regulation is measured from low line to high line at rated load. 4.Load regulation is measured from 20% to 100% rated load.