



1W DC-DC Unregulated Dual Output Converter

DET01 series



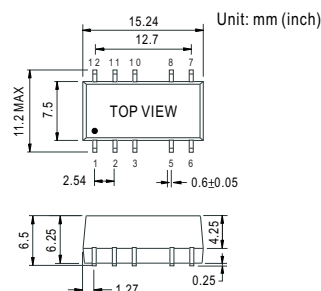
- Features :
- 3000VDC I/O isolation
- Internal SMD technology
- Protection: Short circuit
- Cooling by free air convection
- Non-conductive plastic case
- SMD package styles
- 100% full load burn-in test
- Low cost / High reliability
- Approved: UL / CUL
- 1 year warranty

SPECIFICATION



MODEL NO.	E0505T-1W	E1205T-1W	E0509T-1W	E1209T-1W	E0512T-1W	E1212T-1W	E0515T-1W	E1215T-1W
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	
	OUTPUT CURRENT RANGE		±100mA		±56mA		±42mA	
	EFFICIENCY		72%	71%	75%	73%	78%	74%
	RATED POWER		1W		1W		1W	
	RIPPLE & NOISE (max.) Note.2		100mVp-p		100mVp-p		100mVp-p	
	LINE REGULATION Note.3		±1.2% for 1% input variation		±1.2% for 1% input variation		±1.2% for 1% input variation	
	LOAD REGULATION Note.4		±8.0%		±8.0%		±8.0%	
	VOLTAGE TOLERANCE		±8.0%		±8.0%		±8.0%	
INPUT	SWITCHING FREQUENCY(Typ.)		100KHz		100KHz		100KHz	
	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
	NORMAL VOLTAGE		5V	12V	5V	12V	5V	12V
	INPUT CURRENT	Full load	280mA	122mA	280mA	122mA	280mA	122mA
		No load	29mA	18mA	29mA	18mA	29mA	18mA
PROTECTION	PROTECTION		Fuse recommended		Fuse recommended		Fuse recommended	
	OVERLOAD		Momentary		Momentary		Momentary	
			Protection type : Broken		Protection type : Broken		Protection type : Broken	
	SHORT CIRCUIT		Momentary		Momentary		Momentary	
ENVIRONMENT			Protection type : Broken		Protection type : Broken		Protection type : Broken	
	WORKING TEMP.		-40 ~ +85°C (Refer to output load derating curve)		-40 ~ +85°C (Refer to output load derating curve)		-40 ~ +85°C (Refer to output load derating curve)	
	WORKING HUMIDITY		20% ~ 90% RH non-condensing		20% ~ 90% RH non-condensing		20% ~ 90% RH non-condensing	
	STORAGE TEMP., HUMIDITY		-40 ~ +105°C, 10 ~ 95% RH		-40 ~ +105°C, 10 ~ 95% RH		-40 ~ +105°C, 10 ~ 95% RH	
	TEMP. COEFFICIENT		±0.03% / °C (0 ~ 50°C)		±0.03% / °C (0 ~ 50°C)		±0.03% / °C (0 ~ 50°C)	
SAFETY & EMC	VIBRATION		10 ~ 500Hz, 2G 10min./1 cycle, period for 60min. each along X, Y, Z axes		10 ~ 500Hz, 2G 10min./1 cycle, period for 60min. each along X, Y, Z axes		10 ~ 500Hz, 2G 10min./1 cycle, period for 60min. each along X, Y, Z axes	
	SAFETY STANDARDS		UL60950-1, CSA C22.2		UL60950-1, CSA C22.2		UL60950-1, CSA C22.2	
	WITHSTAND VOLTAGE		I/P-O/P: 3KVDC		I/P-O/P: 3KVDC		I/P-O/P: 3KVDC	
	ISOLATION RESISTANCE		I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH		I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH		I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH	
OTHERS	MTBF		500khrs min. MIL-HDBK-217F(25°C)		500khrs min. MIL-HDBK-217F(25°C)		500khrs min. MIL-HDBK-217F(25°C)	
	DIMENSION		15.24*7.5*6.5mm or 0.6"*0.295"*0.24" inch (L*W*H)		15.24*7.5*6.5mm or 0.6"*0.295"*0.24" inch (L*W*H)		15.24*7.5*6.5mm or 0.6"*0.295"*0.24" inch (L*W*H)	
	WEIGHT		1.7g		1.7g		1.7g	

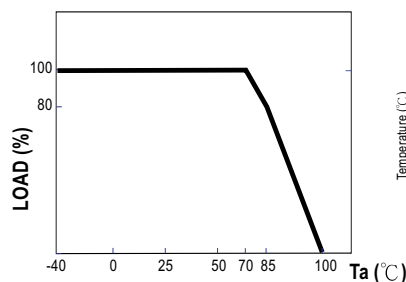
Mechanical Specification



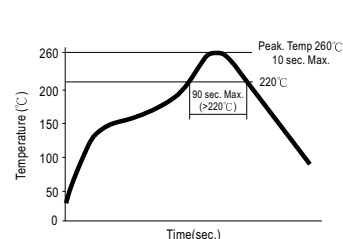
Pin Configuration

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



Reflow Soldering Curve



NOTE

- 1.All parameters are specified at normal input, rated load, 25°C 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.