

DC-DC Converters

**POWER
SOLVE**

TES2M Series, 2 Watt

www.powersolve.co.uk

Features

- Ultracompact SMD package
- Reinforced insulation rated for working voltage up to 300VAC
- Industrial and medical safety approval
- Qualified for leadfree reflow solder process
- Available in tape and reel package



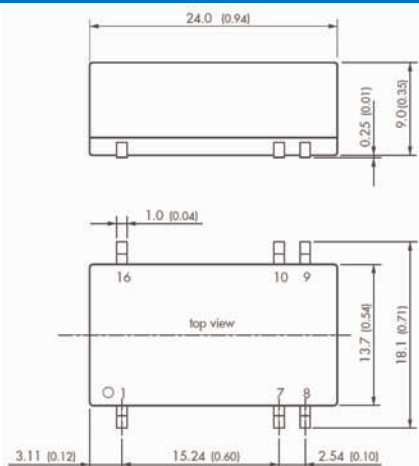
Electrical Specification

Line Regulation	non regulated
Load Regulation	10% max.
Ripple & Noise	<150mV pk-pk (20MHz BW)
Input filter	Pi - filter
Short Circuit Protection	limited 0.5 sec.
Efficiency	70% typical
Operating Temperature Range	-25°C to +71°C (derate at 2.5%/°C above 60°C)
I/O Isolation voltage	4000Vac rms, rated for 300Vac working voltage
I/O Isolation test voltage	6000Vpk (1 sec.)
I/O Isolation capacitance	20pF typical
I/O Isolation resistance	>10,000M ohm
Safety Approvals	UL 60950-1, IEC/EN 60950-1, UL 60601-1, IEC/EN 60601-1, CB report
Casing	plastic (UL94V-0 rated)

Output Voltage and Current Ratings

MODEL	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	RIPPLE & NOISE	EFFICIENCY
TES2-0511M	5VDC $\pm 10\%$	5VDC	400mA	150mV pk-pk max.	66%
TES2-0512M		12VDC	165mA	150mV pk-pk max.	66%
TES2-0513M		15VDC	133mA	150mV pk-pk max.	66%
TES2-0522M		± 12 VDC	± 83 mA	150mV pk-pk max.	72%
TES2-0523M	12VDC $\pm 10\%$	± 15 VDC	± 66 mA	150mV pk-pk max.	73%
TES2-1211M		5VDC	400mA	150mV pk-pk max.	66%
TES2-1212M		12VDC	165mA	150mV pk-pk max.	66%
TES2-1213M		15VDC	133mA	150mV pk-pk max.	66%
TES2-1222M	24VDC $\pm 10\%$	± 12 VDC	± 83 mA	150mV pk-pk max.	74%
TES2-1223M		± 15 VDC	± 66 mA	150mV pk-pk max.	75%
TES2-2411M		5VDC	400mA	150mV pk-pk max.	66%
TES2-2412M		12VDC	165mA	150mV pk-pk max.	66%
TES2-2413M		15VDC	133mA	150mV pk-pk max.	66%
TES2-2422M		± 12 VDC	± 83 mA	150mV pk-pk max.	74%
TES2-2423M		± 15 VDC	± 66 mA	150mV pk-pk max.	75%

Mechanical and Connection Details



Pin	Single Output	Dual Output
1	-Vin (GND)	-Vin (GND)
7	No conn.	No conn.
8	No conn.	Common
9	+Vout	+Vout
10	-Vout	-Vout
16	+Vin (Vcc)	+Vin (Vcc)