



DESCRIPTION: MAX250/MAX251 Compatible Converter Transformers

The **TP102MV** of converter transformers are specifically designed for use with Maxim chipsets to provide isolated RS232 interfaces. Carefully controlled turns ratios ensure consistent performance whilst a toroidal construction minimises EMI.

FEATURES

RoHS compliant	Maxim MAX250/MAX251 compatible	Isolation to 3500VDC
Industry-standard pinout	Surface mount option	UL 94 V-0 package materials
Low profile	Toroidal construction	Fully encapsulated
Industrial temperature range	/	/

FEATURES

Part Number	Turn Ratio
TP102MV	1 : 1

CHARACTERISTICS

Parameter	Conditions	Min.	Typ.	Max.	Units
Primary Inductance, L_P	10kHz, 20mV	0.618	1.0		mH
Leakage Inductance, L_L	10kHz, 20mV			25	μ H
Interwinding Capacitance, C_{ww}	10MHz, 20mV			5.2	pF
Primary D.C. Resistance, R_{DC}				1.34	Ω

ORDER CODE DETAILS

Order Code	Package Type	Packaging Type	Quantity
TP102MV	6 Pin SM	Tube	50
TP102MV-R	6 Pin SM	Tape & Reel	500

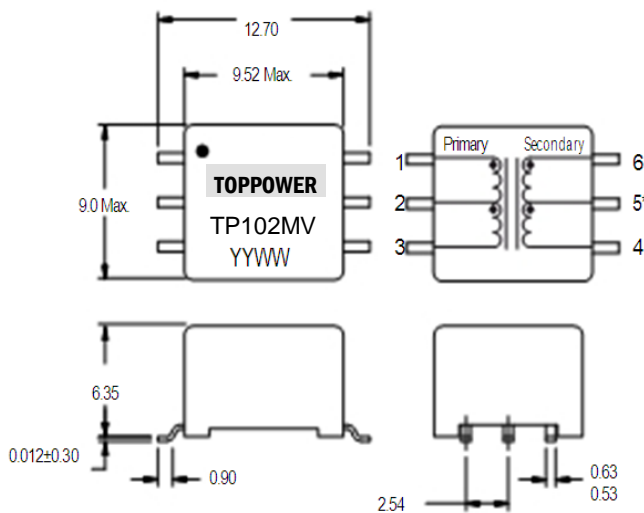
ABSOLUTE MAXIMUM RATINGS

Operating free air temperature range	-40°C to 125°C
Storage temperature range	-50°C to 150°C
Lead temperature 1.5mm from case for 10 seconds	300°C
Peak current, I_{PK}	310mA
Isolation voltage TP102MV (flash tested for 1 second)	3500VDC

All specifications typical at $T_A=25^\circ\text{C}$

MECHANICAL DIMENSIONS

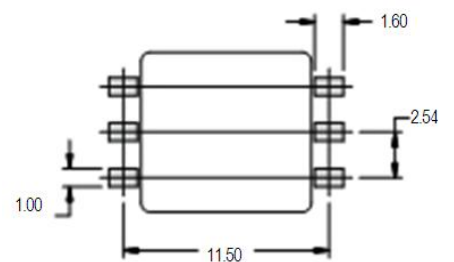
6 Pin SM



Unless otherwise stated all dimensions in inches $\pm 0.25\text{mm}$.
 All pins on a 2.54mm pitch and within $\pm 0.25\text{mm}$ of true position.
 * Pin 5 is connected to secondary center tap. Package Weight 1.0g TYP.

RECOMMENDED FOOTPRINT DETAILS

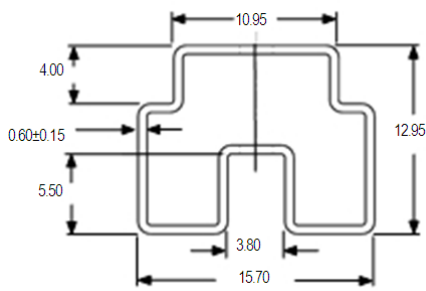
6 Pin SM



Unless otherwise stated all dimensions in inches (mm) ± 0.01 (0.25). All pins on a 0.1 (2.54) pitch and within ± 0.01 (0.25) of true position.

TUBE OUTLINE DIMENSIONS

SOLDERING INFORMATION

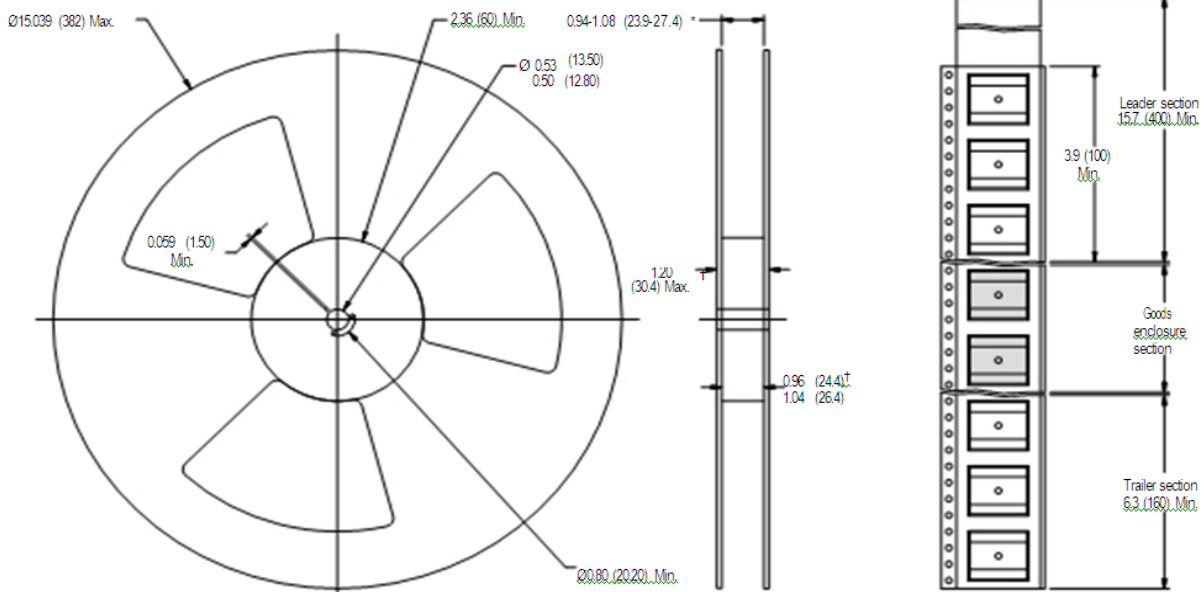


Pin finish	Matte tin
Peak wave solder temperature	300°C for 10 seconds
Peak reflow temperature	Max Temp 245°C, reflow time 60-90S

Unless otherwise stated all dimensions in inches (mm) ±0.25.
 Tube length: 18.3±0.08 (465±2).
 Tube material: Antistatic coated clear pvc.

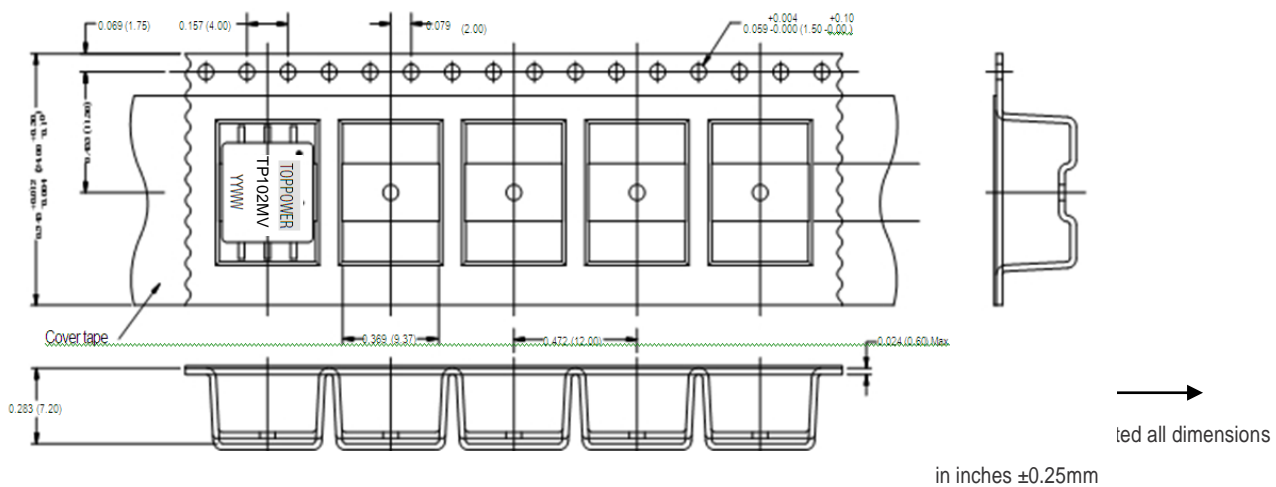
TAPE & REEL SPECIFICATIONS

REEL OUTLINE DIMENSIONS



Unless otherwise stated all dimensions in inches (mm) ±0.01(0.25).
 *Includes flange distortion at outer edge .t Measured at hub.

TAPE OUTLINE DIMENSIONS



→
 ted all dimensions

in inches ±0.25mm