



**DESCRIPTION: MAX250/MAX251 Compatible Converter Transformers**

The **TP100MV** 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 6000VDC
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
TP100MV	1: 1.1

**CHARACTERISTICS**

Parameter	Conditions	Min.	Typ.	Max.	Units
Primary Inductance, $L_P$	100 kHz, 0.1V		300		$\mu$ H
Leakage Inductance, $L_L$	10kHz, 20mV			25	$\mu$ H
Interwinding Capacitance, $C_{ww}$	10MHz, 20mV			5.2	pF
Primary D.C. Resistance, $R_{DC}$				0.28	$\Omega$

**ORDER CODE DETAILS**

Order Code	Package Type	Packaging Type	Quantity
TP100MV	6 Pin SM	Tube	50
<b>TP100MV-R</b>	<b>6 Pin SM</b>	<b>Tape &amp; Reel</b>	<b>500</b>

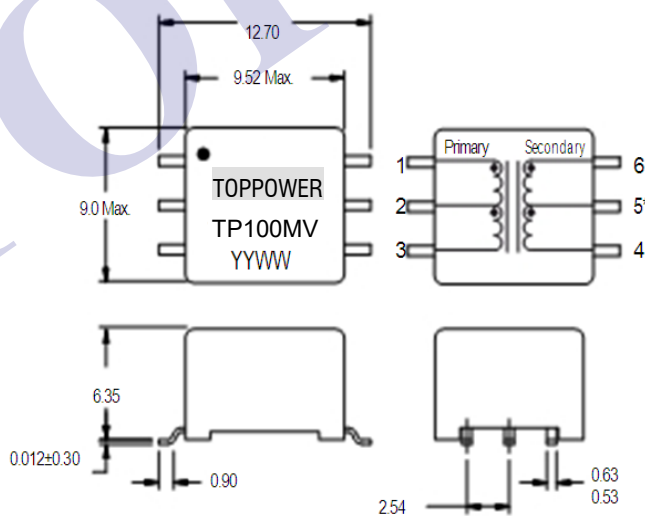
**ABSOLUTE MAXIMUM RATINGS**

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 TP100MV (flash tested for 1 second)	6000VDC

All specifications typical at TA=25°C

**MECHANICAL DIMENSIONS**

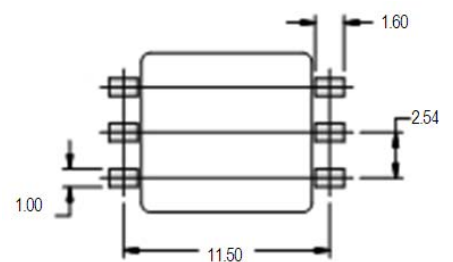
**6 Pin SM**



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

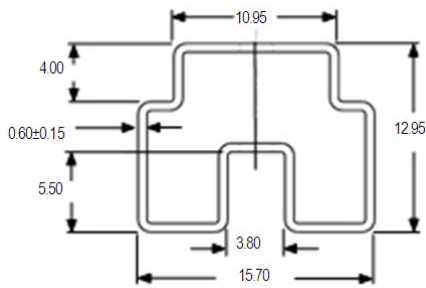
**RECOMMENDED FOOTPRINT DETAILS**

**6 Pin SM**



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

**TUBE OUTLINE DIMENSIONS**



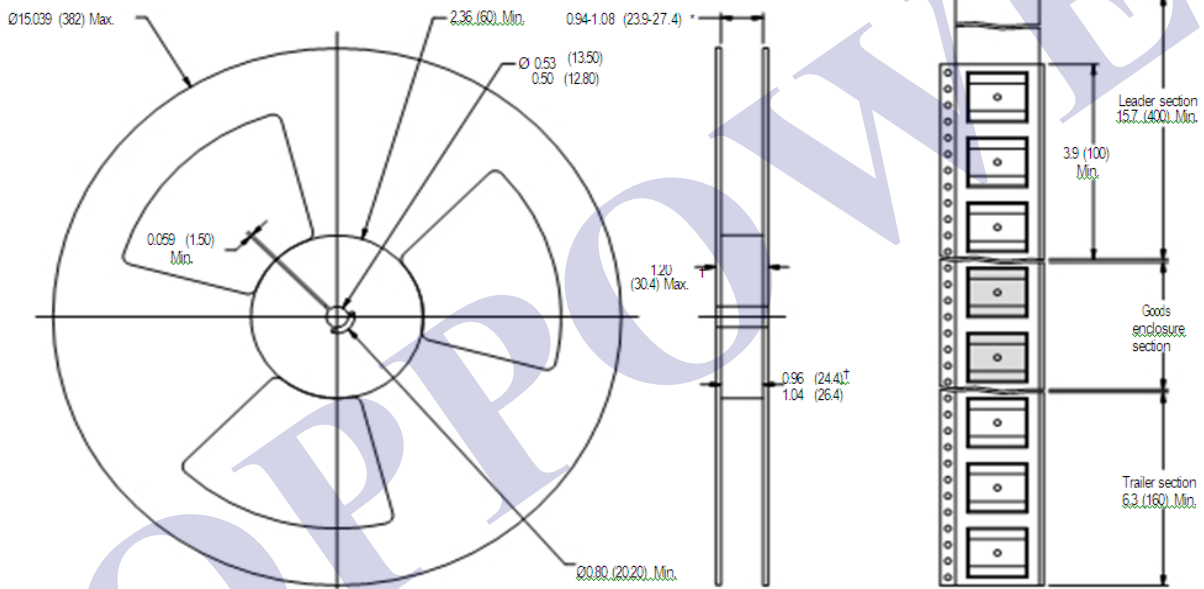
Unless otherwise stated all dimensions in inches (mm) ±0.25.  
 Tube length: 18.3±0.08 (465±2).  
 Tube material: Antistatic coated clear pvc.

**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

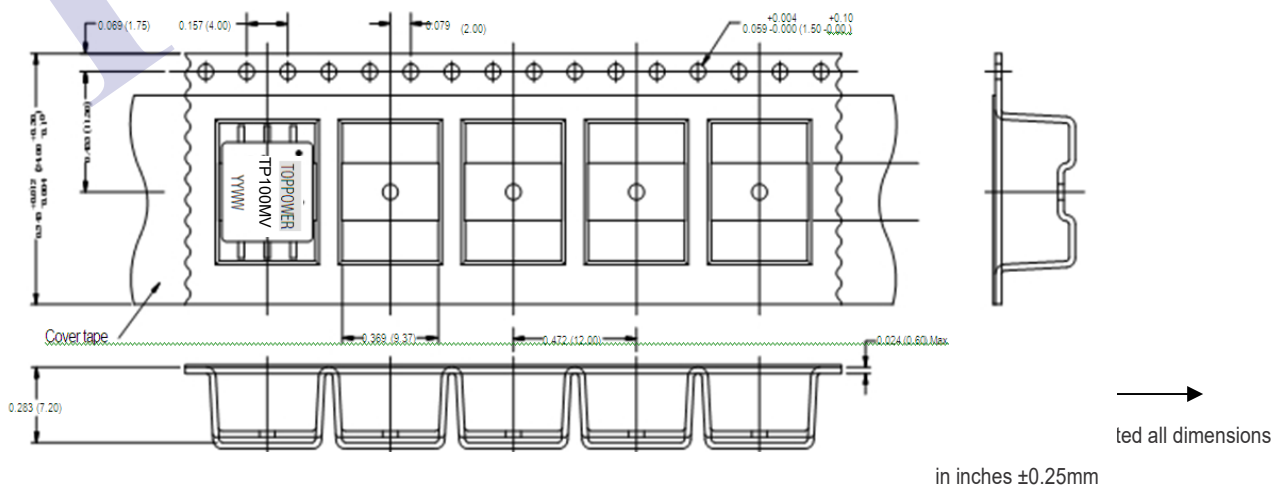
**TAPE & REEL SPECIFICATIONS**

**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**



in inches ±0.25mm