TP108MV



DESCRIPTION: MAX250/MAX251Compatible Converter Transformers

The TP108MV 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 | Indust | Industrial temperature range | | | Isolation 3125Vac | | | | |
| Industry-standard pinout | Surfac | Surface mount option | | | UL 94 V-0 package materials | | | | |
| Low profile | Toroid | Toroidal construction | | | Fully encapsulated | | | | |
| FEATURES | | | | | | | | | |
| Part Number | Turn F | Turn Ratio | | | | | | | |
| TP108MV | 1: 3.5 | 1: 3.5(1-3:4-6) | | | | | | | |
| CHARACTERISTICS | | | | | | | | | |
| Parameter | Conditi | ons | | Min. | | Тур. | Max. | Units | |
| Primary Inductance, L _P | 10kHz, | 10mVAC | | 86 | | 1.0 | | uH | |
| Leakage Inductance, L _L | 100kHz | z, 100mVAC | | 200 | | | 400 | nH | |
| D.C. Resistance, R _{DC} 1-3 | @20°C | ; | | | | | 0.1 | Ω | |
| D.C. Resistance, R _{DC} 4-6 | @20°C | | | 0.352 | 2 | | 0.528 | Ω | |
| ORDER CODE DETAILS | | | | | | | | | |
| rder Code Package Type | | Package Type | | Packaging Type | | Quantity | | | |
| TP108MV | 6 Pin SM | | | Tube | | 50 | | | |
| TP108MV-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 | | | | | | |
| Isolation voltage TP108MV (flash tested for 1 second) | | | 3125Vac | | | | | | |

All specifications typical at TA=25°C

RECOMMENDED FOOTPRINT DETAILS **MECHANICAL DIMENSIONS** 6 Pin SM 6 Pin SM 12.70 9.52 Max. TOPPOWER. 9.0 Max TP108MV YYWW 11.50 0.012±0.30 0.63 Unless otherwise stated all dimensions in inches (mm) ±0.01 (0.25). All pins on a 0.1 (2.54) pitch and within Unless otherwise stated all dimensions in inches ±0.25mm. All pins on a 2.54mm pitch and within ±0.25mm of true position. * Pin 5 is connected to secondary center tap. Package Weight 1.0g TYP. ±0.01 (0.25) of true position.



TUBE OUTLINE DIMENSIONS

12.95 0.60±0.15 5.50

Unless otherwise stated all dimensions in inches (mm) ±0.25.

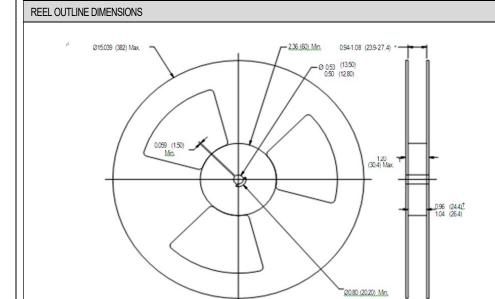
Tube length: 18.3±0.08 (465±2).

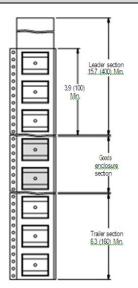
Tube material: Antistatic coated clear pvc.

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

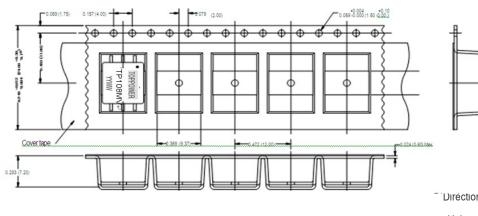


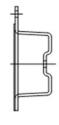


Unless otherwise stated all dimensions in inches (mm) ±0.01(0.25).

*Includes flange distortion at outer edge .t Measured at hub.

TAPE OUTLINE DIMENSIONS





Direction of unreeling —

Unless otherwise stated all dimensions

in inches ±0.25mm