

10/100 Base-T Single Port LAN Transformer Extended Temperature

ALAN-101

RoHS/RoHS II Compliant



11.43 x 9.24 x 5.37 mm

FEATURES:

- Meet IEEE802.3 specification
- Extended Temperature (-40°C - +85°C)
- ROHS peak reflow temperature rating 230°C
- 1500Vrms Hi-Pot

APPLICATIONS:

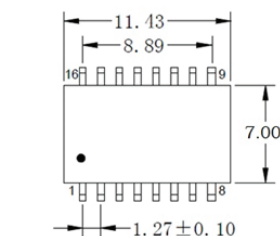
- Designed for most leading PHY IC manufacturers such as Broadcom, Marvell, Micrel, & Microsemi
- 10/100Base-T Ethernet-LAN
- VoIP
- Symmetrical Tx & RX channels for Auto MDI/MDIX capability
- Provides signal conditioning, EMI suppression and signal isolation.
- Hubs/Switches/Routers/Servers/NIC Cards

STANDARD SPECIFICATIONS:

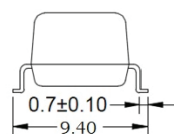
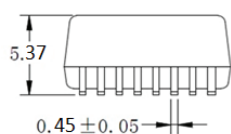
Key Electrical Specifications @ 25°C

| Parameters | Minimum | Typical | Maximum | Units | Notes |
|---------------------------------------|--|---------|---------|---------------|-----------------|
| Operating Temperature | -40 | | +85 | °C | |
| Storage Temperature | -40 | | +85 | °C | |
| Turn Ratio ($\pm 2\%$) | | 1CT:1CT | | | |
| Inductance (OCL) | 350 | | | μH | 100KHz/0.1V@8mA |
| Leakage Inductance (LL) | | | 0.5 | μH | 100KHz/0.1V |
| Cw/w | | | 30 | pF | 100KHz/0.1V |
| DC Resistance | | | 1.2 | Ω | |
| Insertion Loss | | | -1.1 | dB | 0.1-100MHz |
| Return Loss | | -18 | | dB | 30MHz |
| | | -14 | | | 60MHz |
| | | -11.5 | | | 80MHz |
| Cross Talk | | -45 | | dB | 30MHz |
| | | -40 | | | 60MHz |
| | | -35 | | | 100MHz |
| Differential to Common Mode Rejection | | -42 | | dB | 30MHz |
| | | -37 | | | 50MHz |
| | | -33 | | | 100MHz |
| Common Mode Rejection | -30 | | | dB | 1-100MHz |
| Hi-Pot | 1500Vrms/0.5mA/60Sec or 1650Vrms/0.5mA/2Sec | | | | |

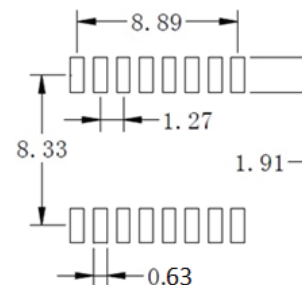
OUTLINE DRAWING:



Package type:
Transfer Molding



Recommended Land Pattern

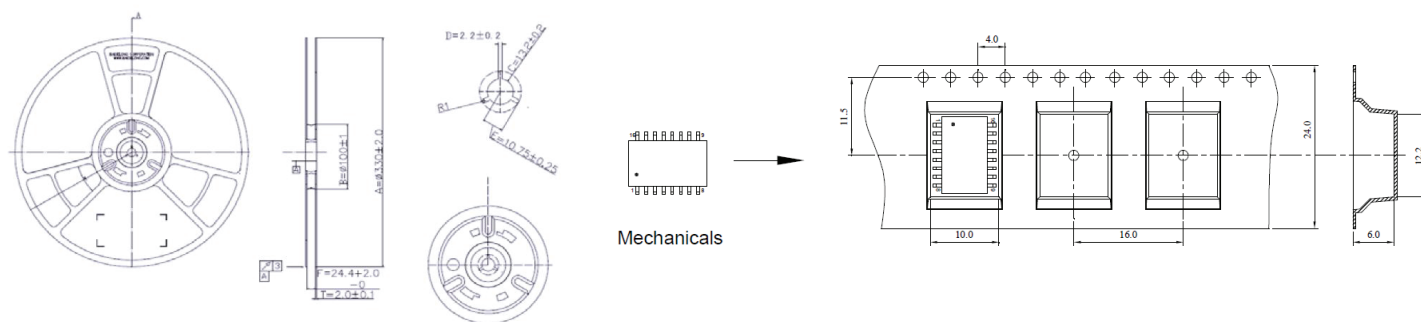


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11.43 x 9.24 x 5.37 mm

| Profile Feature | Pb-Free Assembly |
|---|----------------------------------|
| Average Ramp-Up Rate ($T_{s\ max}$ to T_p) | 3°C /second max. |
| Preheat -Temperature Min ($T_{s\ min}$) -Temperature Max ($T_{s\ max}$) -Time ($t_{s\ min}$ to $t_{s\ max}$) | 100°C 150°C 60-120 seconds |
| Time maintained above: -Temperature (T_L) -Time (t_L) | 183°C 60-150 seconds |
| Peak/Classification Temperature (T_p) | 230±5°C |
| Time within 5°C of actual Peak Temperature (tp) | 10-30 seconds |
| Ramp-Down Rate | 6°C /seconds max |
| Time 25°C to Peak Temperature | 8 minutes max. |

Packing: 700pcs/reel
Weight/pcs: 0.65 grams
Weight/carton: 10.6 kg



Dimensions: mm

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