

10BASE-T Isolation Modules

Low Profile Card Bus and PCMCIA Packages

HALO
ELECTRONICS, INC.



Product Features:

- Standard series of 16 pin isolation modules to meet the isolation and impedance matching requirements of IEEE 802.3 for 10BASE-T
- 1500Vrms Isolation
- Choice of Card Bus or PCMCIA packages
- Patented Open Frame Construction
- Tested and approved by leading ethernet controller chip manufacturers

| Card Bus Part Number | Turns Ratio $\pm 3\%$ (1-3:16-14) / (6-8:11-9) | PRI OCL (μH) | PRI/SEC Cw/w (pF max) | PRI DCR (Ω max) | Package/Schematic | Temp Range |
|----------------------|---|---------------------------|-----------------------|-------------------------|-------------------|--------------|
| TG04-1006J1RL | (1CT:1CT) / (1CT:1CT) | 100 Typ | 9 | 0.50 | J/A | 0 to +70°C |
| TG04-2006J1RL | (1CT:1CT) / (1CT:1CT) | 200 Typ | 15 | 0.65 | J/A | -40 to +85°C |
| TG41-2006JRL | (1CT:1CT) / 1CT:2.5CT) | 200/35 Min | 15 | 0.80 | J/B | -40 to +85°C |
| TG42-1406J1RL | (1CT:1CT) / (1CT: $\sqrt{2}$ CT) | 140 Typ | 15 | 0.65 | J/A | 0 to +70°C |
| TG43-1406JRL | (1CT:1CT) / (1CT: $\sqrt{2}$ CT) | 140 Typ | 15 | 0.65 | J/B | 0 to +70°C |
| TG62-1006J1RL | (2CT:1CT) / (1CT:1CT) | 150 Min | 10 | 0.70 | J/A | 0 to +70°C |
| TG66-1006JRL | (2CT:1CT) / (1CT:1CT) | 150 Min | 10 | 0.70 | J/B | 0 to +70°C |
| TG74-1406J1RL | (1CT:1CT) / (1CT:2CT) | 140/25 Typ | 15 | 0.65 | J/A | -40 to +85°C |
| TG75-1406JRL | (1CT:1CT) / (1CT:2CT) | 140/25 Typ | 15 | 0.65 | J/B | -40 to +85°C |
| TG81-1006JRL | (1CT:1CT) / (1CT:1CT) | 100 Typ | 9 | 0.50 | J/B | 0 to +70°C |
| TG84-2006J1RL | (1CT:2CT) / (1CT:1CT) | 50/200 Min | 12 | 0.90 | J/A | -40 to +85°C |
| TG86-2006JRL | (1CT:2CT) / (1CT:1CT) | 50/200 Min | 12 | 0.90 | J/B | -40 to +85°C |
| TG92-2006J1RL | (1CT:1CT) / (1CT:2.5CT) | 200/35 Min | 15 | 0.80 | J/A | -40 to +85°C |

| PCMCIA Part Number | Turns Ratio $\pm 3\%$ (1-3:16-14) / (6-8:11-9) | PRI OCL (μH) | PRI/SEC Cw/w (pF max) | PRI DCR (Ω max) | Package/Schematic | Temp Range |
|--------------------|---|---------------------------|-----------------------|-------------------------|-------------------|--------------|
| TG04-1006P1RL | (1CT:1CT) / (1CT:1CT) | 100 Typ | 9 | 0.50 | P/A | 0 to +70°C |
| TG04-2006P1RL | (1CT:1CT) / (1CT:1CT) | 200 Typ | 15 | 0.65 | P/A | -40 to +85°C |
| TG41-2006PRL | (1CT:1CT) / 1CT:2.5CT) | 200/35 Min | 15 | 0.80 | P/B | -40 to +85°C |
| TG42-1406P1RL | (1CT:1CT) / (1CT: $\sqrt{2}$ CT) | 140 Typ | 15 | 0.65 | P/A | 0 to +70°C |
| TG43-1406PRL | (1CT:1CT) / (1CT: $\sqrt{2}$ CT) | 140 Typ | 15 | 0.65 | P/B | 0 to +70°C |
| TG62-1006P1RL | (2CT:1CT) / (1CT:1CT) | 150 Min | 10 | 0.70 | P/A | 0 to +70°C |
| TG66-1006PRL | (2CT:1CT) / (1CT:1CT) | 150 Min | 10 | 0.70 | P/B | 0 to +70°C |
| TG74-1406P1RL | (1CT:1CT) / (1CT:2CT) | 140/25 Typ | 15 | 0.65 | P/A | -40 to +85°C |
| TG75-1406PRL | (1CT:1CT) / (1CT:2CT) | 140/25 Typ | 15 | 0.65 | P/B | -40 to +85°C |
| TG81-1006PRL | (1CT:1CT) / (1CT:1CT) | 100 Typ | 9 | 0.50 | P/B | 0 to +70°C |
| TG84-2006P1RL | (1CT:2CT) / (1CT:1CT) | 50/200 Min | 12 | 0.90 | P/A | -40 to +85°C |
| TG86-2006PRL | (1CT:2CT) / (1CT:1CT) | 50/200 Min | 12 | 0.90 | P/B | -40 to +85°C |

For additional information contact your [local representative](#), or HALO's support staff at (650) 903-3800 or info@haloelectronics.com

Low Profile 10BASE-T Isolation Modules

Package J



Dimensions are in inches [mm]
Co-Planarity: 0.004 [0.10]



Recommended
Solder Pad Layout

US Patent Numbers
5,656,985 6,297,721 B1
6,297,720 B1 6,320,489 B1
6,344,785 B1 6,662,431 B1

Package P



Dimensions are in inches [mm]
Co-Planarity: 0.004 [0.10]



Recommended
Solder Pad Layout

Schematic A



Schematic B



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HALO® Electronics is a leading supplier of high quality communication magnetics including signal transformers, filters, CMR chokes, PoE power transformers, DC/DC converters, and integrated Ethernet connectors. HALO's leading edge technology solutions are manufactured in ISO9001 and ISO14001 factories offering high quality products at a competitive price.