

# 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 $\pm 3\%$<br>(1-3:16-14) / (6-8:11-9) | PRI OCL ( $\mu\text{H}$ ) | PRI/SEC Cw/w (pF max) | PRI DCR ( $\Omega$ 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 $\pm 3\%$<br>(1-3:16-14) / (6-8:11-9) | PRI OCL ( $\mu\text{H}$ ) | PRI/SEC Cw/w (pF max) | PRI DCR ( $\Omega$ 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 |

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# 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]

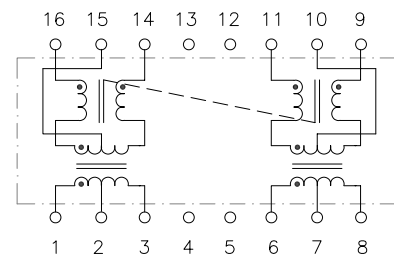


Recommended  
Solder Pad Layout

## Schematic A



## Schematic B



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