

# 10BASE-T Isolation Modules

16 Pin SOIC Package 10BASE-T Transformers



## Product Features:

- Standard series of 16 Pin SOIC Isolation Modules to meet the isolation and impedance matching requirements of IEEE 802.3 for 10BASE-T
- 100% Compliance Testing
- 1500Vrms Hi-Pot
- Patented Open Frame Construction
- UL/EN60950 Recognized

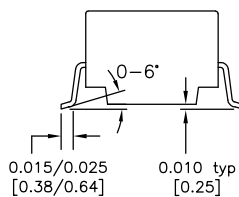
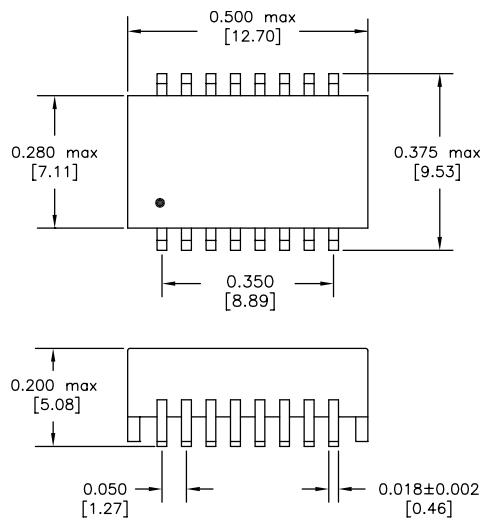
| Part Number   | Turns Ratio $\pm 3\%$<br>(1-3:16-14) / (6-8:11-9) | PRI<br>OCL<br>( $\mu\text{H}$ ) | PRI/SEC<br>Cw/w<br>(pF max) | PRI<br>LL<br>( $\mu\text{H}$ max) | Schematic | Temp<br>Range           | RoHS <sup>1</sup> |
|---------------|---------------------------------------------------|---------------------------------|-----------------------------|-----------------------------------|-----------|-------------------------|-------------------|
| TG04-1006N1LF | (1CT:1CT) / (1CT:1CT)                             | 100 Typ                         | 9                           | 0.4                               | A         | 0 to +70°C              | Pb-Free           |
| TG04-1006N1RL | (1CT:1CT) / (1CT:1CT)                             | 100 Typ                         | 9                           | 0.4                               | A         | 0 to +70°C              | RoHS (7a)         |
| TG04-2006N1LF | (1CT:1CT) / (1CT:1CT)                             | 200 Typ                         | 15                          | 0.3                               | A         | -40 to +85°C            | Pb-Free           |
| TG04-2006N1RL | (1CT:1CT) / (1CT:1CT)                             | 200 Typ                         | 15                          | 0.3                               | A         | -40 to +85°C            | RoHS (7a)         |
| TG41-2006NLF  | (1CT:1CT) / (1CT:2.5CT)                           | 200/35 Min                      | 15                          | 0.4                               | B         | -40 to +85°C            | Pb-Free           |
| TG41-2006NRL  | (1CT:1CT) / (1CT:2.5CT)                           | 200/35 Min                      | 15                          | 0.4                               | B         | -40 to +85°C            | RoHS (7a)         |
| TG42-1406N1LF | (1CT:1CT) / (1CT:1.41CT)                          | 140 Typ                         | 15                          | 0.4                               | A         | 0 to +70°C              | Pb-Free           |
| TG42-1406N1RL | (1CT:1CT) / (1CT:1.41CT)                          | 140 Typ                         | 15                          | 0.4                               | A         | 0 to +70°C              | RoHS (7a)         |
| TG43-1406NLF  | (1CT:1CT) / (1CT:1.41CT)                          | 140 Typ                         | 15                          | 0.4                               | B         | 0 to +70°C <sup>2</sup> | Pb-Free           |
| TG43-1406NRL  | (1CT:1CT) / (1CT:1.41CT)                          | 140 Typ                         | 15                          | 0.4                               | B         | 0 to +70°C <sup>2</sup> | RoHS (7a)         |
| TG62-1006N1LF | (2CT:1CT) / (1CT:1CT)                             | 150 Min                         | 10                          | 0.6                               | A         | 0 to +70°C              | Pb-Free           |
| TG62-1006N1RL | (2CT:1CT) / (1CT:1CT)                             | 150 Min                         | 10                          | 0.6                               | A         | 0 to +70°C              | RoHS (7a)         |
| TG66-1006NLF  | (2CT:1CT) / (1CT:1CT)                             | 150 Min                         | 10                          | 0.9                               | B         | 0 to +70°C              | Pb-Free           |
| TG66-1006NRL  | (2CT:1CT) / (1CT:1CT)                             | 150 Min                         | 10                          | 0.9                               | B         | 0 to +70°C              | RoHS (7a)         |
| TG74-1406N1LF | (1CT:1CT) / (1CT:2CT)                             | 140/25 Typ                      | 15                          | 0.4                               | A         | -40 to +85°C            | Pb-Free           |
| TG74-1406N1RL | (1CT:1CT) / (1CT:2CT)                             | 140/25 Typ                      | 15                          | 0.4                               | A         | -40 to +85°C            | RoHS (7a)         |
| TG75-1406NLF  | (1CT:1CT) / (1CT:2CT)                             | 140/25 Typ                      | 15                          | 0.4                               | B         | -40 to +85°C            | Pb-Free           |
| TG75-1406NRL  | (1CT:1CT) / (1CT:2CT)                             | 140/25 Typ                      | 15                          | 0.4                               | B         | -40 to +85°C            | RoHS (7a)         |
| TG81-1006NLF  | (1CT:1CT) / (1CT:1CT)                             | 100 Typ                         | 9                           | 0.3                               | B         | 0 to +70°C              | Pb-Free           |
| TG81-1006NRL  | (1CT:1CT) / (1CT:1CT)                             | 100 Typ                         | 9                           | 0.3                               | B         | 0 to +70°C              | RoHS (7a)         |
| TG84-2006N1LF | (1CT:2CT) / (1CT:1CT)                             | 50/200 Min                      | 11                          | 0.15                              | A         | -40 to +85°C            | Pb-Free           |
| TG84-2006N1RL | (1CT:2CT) / (1CT:1CT)                             | 50/200 Min                      | 11                          | 0.15                              | A         | -40 to +85°C            | RoHS (7a)         |
| TG86-2006NLF  | (1CT:2CT) / (1CT:1CT)                             | 50/200 Min                      | 11                          | 0.3                               | B         | -40 to +85°C            | Pb-Free           |
| TG86-2006NRL  | (1CT:2CT) / (1CT:1CT)                             | 50/200 Min                      | 11                          | 0.3                               | B         | -40 to +85°C            | RoHS (7a)         |
| TG92-2006N1LF | (1CT:1CT) / (1CT:2.5CT)                           | 200/35 Min                      | 15                          | 0.4                               | A         | -40 to +85°C            | Pb-Free           |
| TG92-2006N1RL | (1CT:1CT) / (1CT:2.5CT)                           | 200/35 Min                      | 15                          | 0.4                               | A         | -40 to +85°C            | RoHS (7a)         |

## Notes:

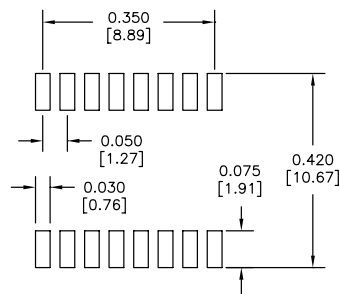
1. Pb-Free parts are RoHS 6/6 compliant. RoHS (7a) parts contain lead per exemption 7a which is set to expire in July 2016.
2. TG43-1406NRL can be operated in -40 to +85°C environment when using the Cirrus Logic CS8900A-IQ (5V) Transceiver.
3. Parts with RL suffix are not recommended for new designs.
4. Please contact the factory or your local representative for individual datasheets or additional information.

# 10BASE-T Isolation Modules

## Package N/N1

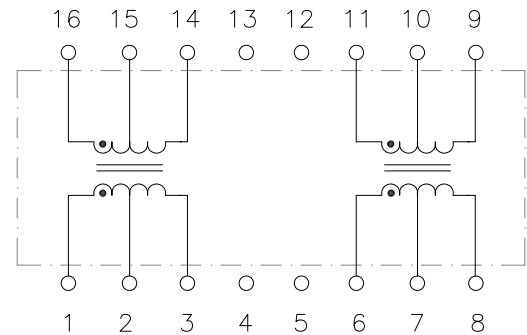


Dimensions: inch [mm]  
Co-Planarity: 0.004 [0.10]

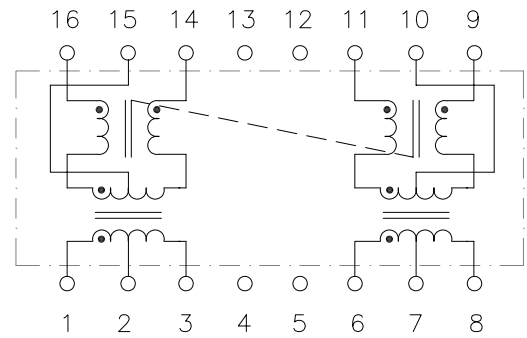


Recommended  
Solder Pad Layout

## Schematic A



## Schematic B



### 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

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