

# T1/E1 Line Interface Modules

SMD Single Channel Transformer



## Product Features:

- T1, E1, CEPT and PRI ISDN Applications
- Available for All Popular LIU's
- 1500 Vrms Hi-Pot
- Patented Open Frame Construction
- UL/EN60950

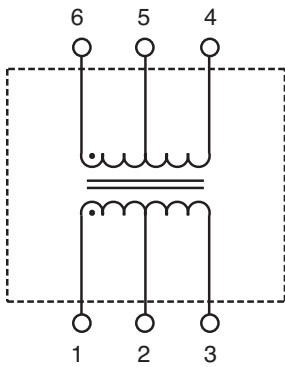
| Part Number   | Schem. | Turns Ratio<br>PRI/SEC | OCL<br>(mH Typ) | Cw/w<br>(pF max) | DCR<br>Pri<br>( $\Omega$ max) | Primary<br>Pins | Temperature<br>Range <sup>2</sup> | RoHS <sup>1</sup> |
|---------------|--------|------------------------|-----------------|------------------|-------------------------------|-----------------|-----------------------------------|-------------------|
| TG02-1205NSLF | D      | 1CT:1                  | 1.2             | 30               | 0.70                          | 1-3             | 0 to 70°C                         | Pb-Free           |
| TG02-1205NSRL | D      | 1CT:1                  | 1.2             | 30               | 0.70                          | 1-3             | 0 to 70°C                         | RoHS (7a)         |
| TG04-1205NSLF | A      | 1CT:1CT                | 1.2             | 30               | 0.70                          | 1-3             | 0 to 70°C                         | Pb-Free           |
| TG04-1205NSRL | A      | 1CT:1CT                | 1.2             | 30               | 0.70                          | 1-3             | 0 to 70°C                         | RoHS (7a)         |
| TG04-1505NSLF | A      | 1CT:1CT                | 1.5             | 35               | 0.80                          | 1-3             | -40 to +85°C                      | Pb-Free           |
| TG04-1505NSRL | A      | 1CT:1CT                | 1.5             | 35               | 0.80                          | 1-3             | -40 to +85°C                      | RoHS (7a)         |
| TG08-1205NSLF | A      | 1CT:2CT                | 1.2             | 30               | 0.70                          | 1-3             | 0 to 70°C                         | Pb-Free           |
| TG08-1205NSRL | A      | 1CT:2CT                | 1.2             | 30               | 0.70                          | 1-3             | 0 to 70°C                         | RoHS (7a)         |
| TG10-1205NSLF | B      | 1:1:1                  | 1.2             | 30               | 0.70                          | 3-4             | 0 to 70°C                         | Pb-Free           |
| TG10-1205NSRL | B      | 1:1:1                  | 1.2             | 30               | 0.70                          | 3-4             | 0 to 70°C                         | RoHS (7a)         |
| TG15-1205NSLF | D      | 2CT:1                  | 1.2             | 30               | 0.70                          | 1-3             | 0 to 70°C                         | Pb--Free          |
| TG15-1205NSRL | D      | 2CT:1                  | 1.2             | 30               | 0.70                          | 1-3             | 0 to 70°C                         | RoHS (7a)         |
| TG23-1505NSLF | C      | 1:2.42CT               | 1.5             | 35               | 0.80                          | 1-3             | -40 to +85°C                      | Pb-Free           |
| TG23-1505NSRL | C      | 1:2.42CT               | 1.5             | 35               | 0.80                          | 1-3             | -40 to +85°C                      | RoHS (7a)         |
| TG37-1205NSLF | C      | 1:1.14CT               | 1.2             | 30               | 0.70                          | 1-3             | 0 to 70°C                         | Pb-Free           |
| TG37-1205NSRL | C      | 1:1.14CT               | 1.2             | 30               | 0.70                          | 1-3             | 0 to 70°C                         | RoHS (7a)         |
| TG38-1205NSLF | D      | 1:1.15CT               | 1.2             | 30               | 0.70                          | 4-6             | 0 to 70°C                         | Pb-Free           |
| TG38-1205NSRL | D      | 1:1.15CT               | 1.2             | 30               | 0.70                          | 4-6             | 0 to 70°C                         | RoHS (7a)         |
| TG42-1205NSLF | A      | 1CT:1.41CT             | 1.2             | 30               | 0.70                          | 1-3             | 0 to 70°C                         | Pb-Free           |
| TG42-1205NSRL | A      | 1CT:1.41CT             | 1.2             | 30               | 0.70                          | 1-3             | 0 to 70°C                         | RoHS (7a)         |
| TG70-1205NSLF | C      | 1:1.36CT               | 1.2             | 30               | 0.70                          | 1-3             | 0 to 70°C                         | Pb-Free           |
| TG70-1205NSRL | C      | 1:1.36CT               | 1.2             | 30               | 0.70                          | 1-3             | 0 to 70°C                         | RoHS (7a)         |
| TG71-1205NSLF | C      | 1:2.3CT                | 1.2             | 30               | 0.70                          | 1-3             | 0 to 70°C                         | Pb-Free           |
| TG71-1205NSRL | C      | 1:2.3CT                | 1.2             | 30               | 0.70                          | 1-3             | 0 to 70°C                         | RoHS (7a)         |

## Notes:

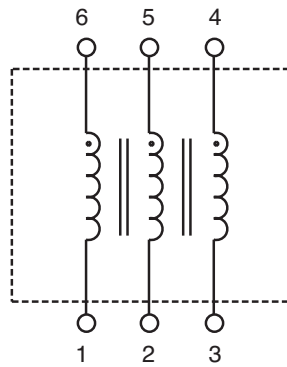
1. Pb-Free parts are RoHS 6/6 compliant. RoHS (7a) parts contain lead per exemption 7a.
2. Extended temperature parts available. Contact factory for specific part numbers and datasheets.
3. Parts with RL suffix are not recommended for new designs.
4. Please contact the factory or representative for individual datasheets or additional information.

# T1/E1 Line Interface Modules

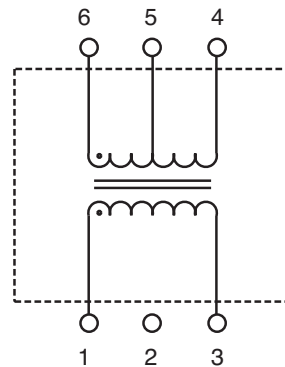
Schematic A



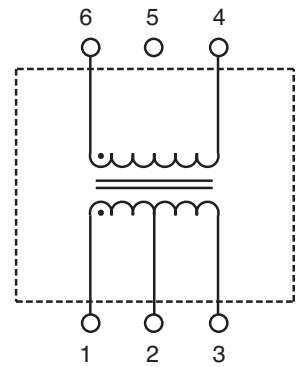
Schematic B



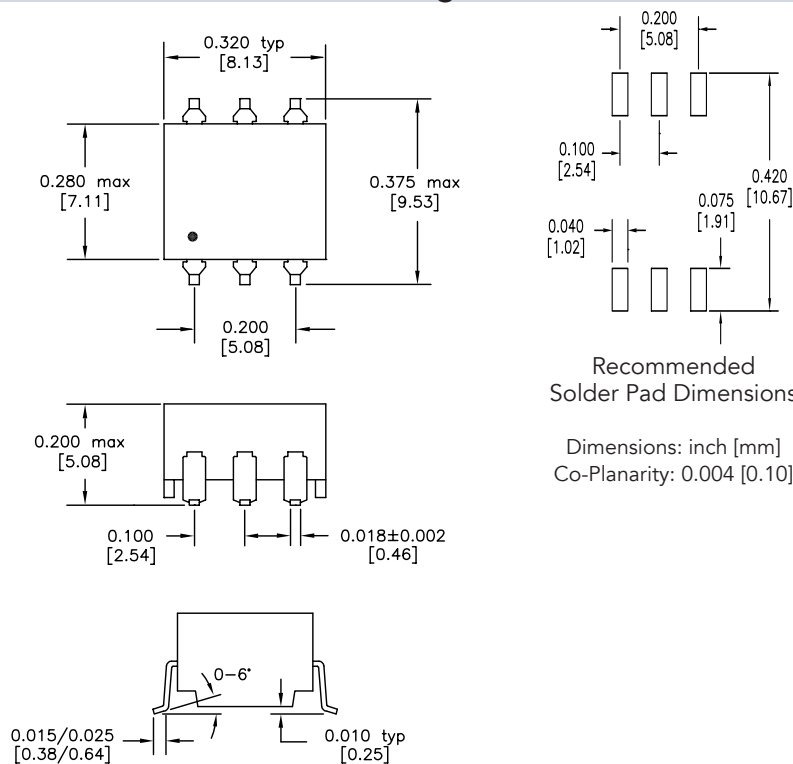
Schematic C



Schematic D



## Package NS



### 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

**HALO**  
ELECTRONICS, INC.

2880 Lakeside Drive #116  
Santa Clara, CA 95054  
(650) 903-3800

[www.halo-electronics.com](http://www.halo-electronics.com)

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.

© Copyright 2017 HALO Electronics, Inc. All rights reserved.

Revised 9/2017. Download the latest version at [www.halo-electronics.com/pdf/discrete-smd6pin-t1.pdf](http://www.halo-electronics.com/pdf/discrete-smd6pin-t1.pdf)

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## HALO Electronics:

[TG08-1205NSRL](#) [TG15-1205NSRL](#) [TG04-1205NSRL](#) [TG10-1205NSRL](#) [TG38-1205NSRL](#) [TG71-1205NSRL](#) [TG37-1205NSRL](#) [TG70-1205NSRL](#) [TG23-1505NSRL](#) [TG02-1205NSRL](#) [TG42-1205NSRL](#) [TG10-1205NSRLTR](#) [TG71-1205NSRLTR](#) [TG04-1205NSRLTR](#) [TG08-1205NSRLTR](#) [TG02-1205NSRLTR](#) [TG23-1505NSRLTR](#) [TG38-1205NSRLTR](#) [TG37-1205NSRLTR](#) [TG42-1205NSRLTR](#) [TG70-1205NSRLTR](#) [TG15-1205NSRLTR](#) [TG04-1505NSRL](#) [TG02-1505NSRL](#) [TG08-1505NSRL](#) [TG08-1505NSRLTR](#) [TG02-1505NSRLTR](#) [TG04-1505NSRLTR](#) [TG04-1205NSLF](#) [TG04-1205NSLFTR](#) [TG08-1205NSLFTR](#) [TG42-1205NSLFTR](#) [TG42-1205NSLF](#) [TG17-1205NSRL](#) [TG38-1505NSRLTR](#) [TG70-1505NSRLTR](#) [TG17-1205NSRLTR](#) [TG70-1505NSLF](#) [TG37-1205NSLFTR](#) [TG37-1205NSLF](#)