

T1/E1 Isolation Modules

SMD Dual Port or Quad Channel T1/E1 Transformers



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

Product Features:

- T1/E1/CEPT/ISDN-PR
- UL/EN60950/IEC62368 Recognized
- 100% Electrical Testing
- 1500Vrms Hi-Pot
- Patented Open Frame Construction

| Part Number | Circuit | Turns Ratio PRI:SEC | PRI OCL (mH typ) | Temp. Range | Primary Pins | RoHS ¹ |
|----------------|---------|------------------------|---------------------|----------------|--------------------------|-------------------|
| TG05-1205NM5LF | A | 1:2 | 1.2 | 0 to 70°C | 1-2, 3-4, 6-7, 8-9 | Pb-Free |
| TG05-1205NM5RL | A | 1:2 | 1.2 | 0 to 70°C | 1-2, 3-4, 6-7, 8-9 | RoHS (7a) |
| TG07-1205NM5LF | B | 1:2CT & 1:2CT | 1.2 | 0 to 70°C | 20-19, 15-14 & 4-5, 9-10 | Pb-Free |
| TG07-1205NM5RL | B | 1:2CT & 1:2CT | 1.2 | 0 to 70°C | 20-19, 15-14 & 4-5, 9-10 | RoHS (7a) |
| TG23-1205NM5LF | A | 1:2.42 | 1.2 | 0 to 70°C | 1-2, 3-4, 6-7, 8-9 | Pb-Free |
| TG23-1205NM5RL | A | 1:2.42 | 1.2 | 0 to 70°C | 1-2, 3-4, 6-7, 8-9 | RoHS (7a) |
| TG25-1205NM5LF | A | 1:1.26 | 1.2 | 0 to 70°C | 1-2, 3-4, 6-7, 8-9 | Pb-Free |
| TG25-1205NM5RL | A | 1:1.26 | 1.2 | 0 to 70°C | 1-2, 3-4, 6-7, 8-9 | RoHS (7a) |
| TG27-S003NM5LF | B | 1:2CT & 1:1.36CT | 1.2 | 0 to 70°C | 20-19, 15-14 & 4-5, 9-10 | Pb-Free |
| TG27-S003NM5RL | B | 1:2CT & 1:1.36CT | 1.2 | 0 to 70°C | 20-19, 15-14 & 4-5, 9-10 | RoHS (7a) |
| TG36-1205NM5LF | A | 1:1.15 & 1:1 | 1.2 | 0 to 70°C | 1-2, 6-7 & 18-17, 13-12 | Pb-Free |
| TG36-1205NM5RL | A | 1:1.15 & 1:1 | 1.2 | 0 to 70°C | 1-2, 6-7 & 18-17, 13-12 | RoHS (7a) |
| TG37-1205NM5LF | B | 1:1.14CT | 1.2 | 0 to 70°C | 20-19, 4-5, 15-14, 9-10 | Pb-Free |
| TG37-1205NM5RL | B | 1:1.14CT | 1.2 | 0 to 70°C | 20-19, 4-5, 15-14, 9-10 | RoHS (7a) |
| TG39-1205NM5LF | A | 1:1.15 | 1.2 | 0 to 70°C | 1-2, 3-4, 6-7, 8-9 | Pb-Free |
| TG39-1205NM5RL | A | 1:1.15 | 1.2 | 0 to 70°C | 1-2, 3-4, 6-7, 8-9 | RoHS (7a) |
| TG42-1205NM5LF | A | 1:√2 | 1.2 | 0 to 70°C | 1-2, 18-17, 6-7, 8-9 | Pb-Free |
| TG42-1205NM5RL | A | 1:√2 | 1.2 | 0 to 70°C | 1-2, 18-17, 6-7, 8-9 | RoHS (7a) |
| TG49-1205NM5LF | B | 1CT:2 & 1:2CT | 1.2 | 0 to 70°C | 1-3, 6-8 & 4-5, 9-10 | Pb-Free |
| TG49-1205NM5RL | B | 1CT:2 & 1:2CT | 1.2 | 0 to 70°C | 1-3, 6-8 & 4-5, 9-10 | RoHS (7a) |
| TG83-1205NM5LF | A | 1:2 & 1:1 | 1.2 | 0 to 70°C | 1-2, 6-7 & 18-17, 13-12 | Pb-Free |
| TG83-1205NM5RL | A | 1:2 & 1:1 | 1.2 | 0 to 70°C | 1-2, 6-7 & 18-17, 13-12 | RoHS (7a) |
| TGSP-S125NM5LF | A | 1:2.4 & 1:1 | 1.2 | 0 to 70°C | 1-2, 8-9 & 3-4, 6-7 | Pb-Free |
| TGSP-S125NM5RL | A | 1:2.4 & 1:1 | 1.2 | 0 to 70°C | 1-2, 8-9 & 3-4, 6-7 | RoHS (7a) |

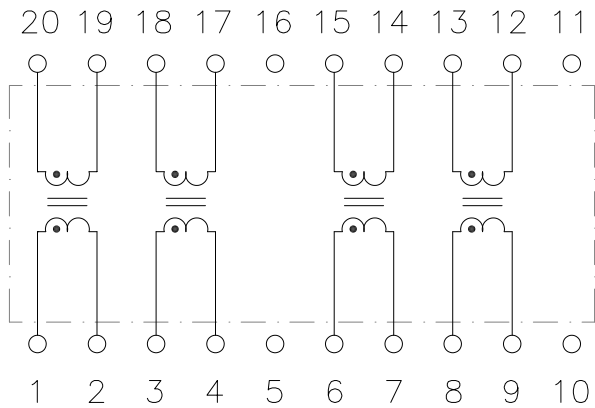
Notes:

1. Pb-Free parts are RoHS 6/6 compliant. RoHS (7a) parts contain lead per exemption 7a which is set to expire in 2024.
2. Parts with RL suffix are not recommended for new designs.
3. Please contact the factory or representative for individual datasheets or additional information.

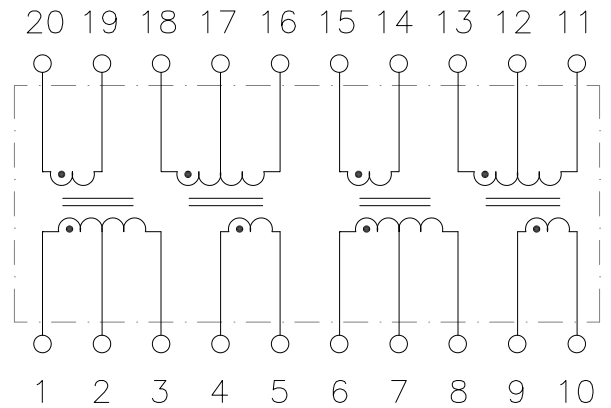
For additional information contact your [local representative](#), or HALO's support staff at (650) 903-3800 or info@haloelectronics.com

HALO Quad Channel T1/E1 Transformer

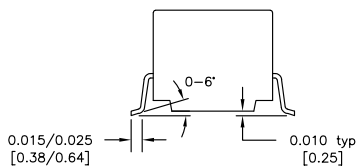
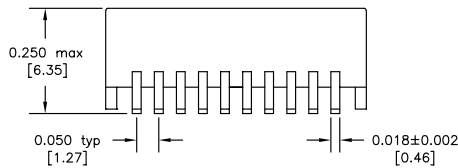
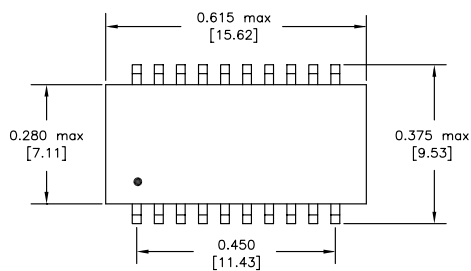
Circuit A



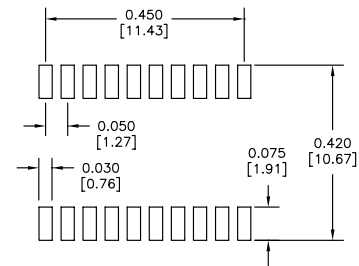
Circuit B



NM5 Package



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



Recommended Solder Pad Layout



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