

# 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 <sup>1</sup>
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)

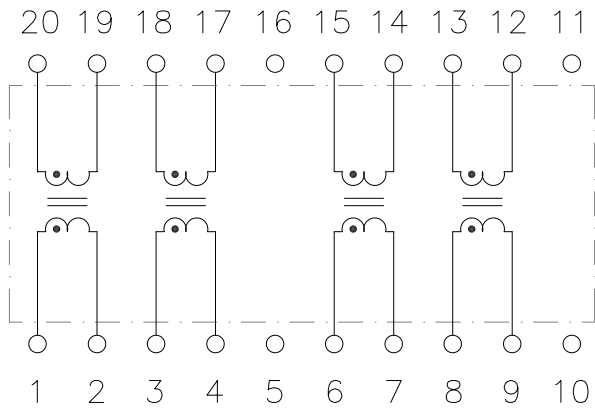
### Notes:

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.

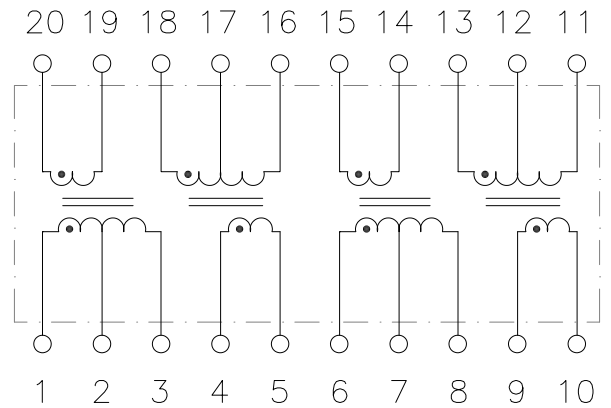
For additional information contact your [local representative](#), or HALO's support staff at (650) 903-3800 or [info@haloelectronics.com](mailto:info@haloelectronics.com)

# HALO Quad Channel T1/E1 Transformer

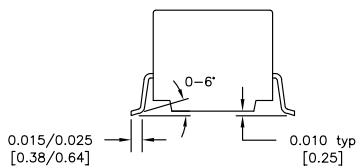
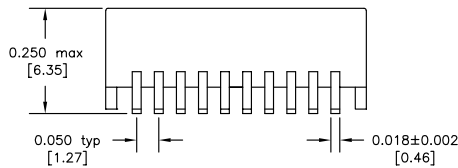
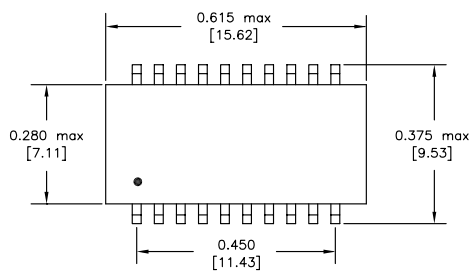
Circuit A



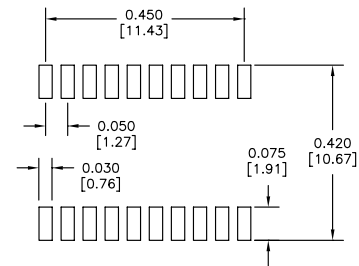
Circuit B



## NM5 Package



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



Recommended Solder Pad Layout



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