

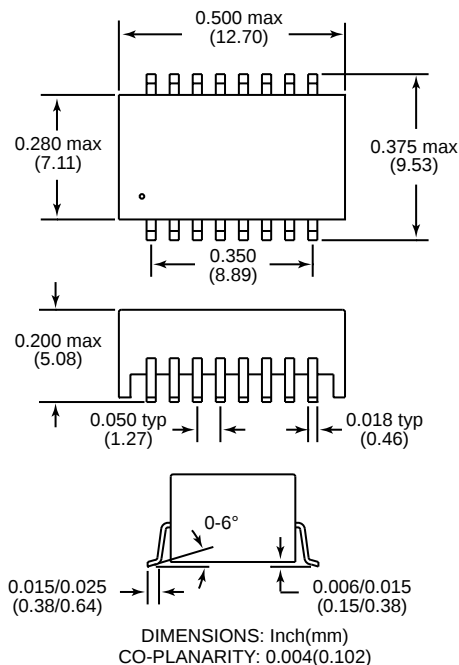
HALO SMD Dual Line Interface Modules

HALO Electronics has developed this standard series of 16 pin SMD Line Interface Modules to meet the isolation and impedance match requirements for T1, E1, CEPT and PRI ISDN applications. Non-standard designs are also available. UL1950, IEC950 and EN60950 recognized. To select the correct line interface magnetic device, please refer to the [HALO LIU Selection Guide](#).



SMD Dual
Line Interface Modules

N1 Package



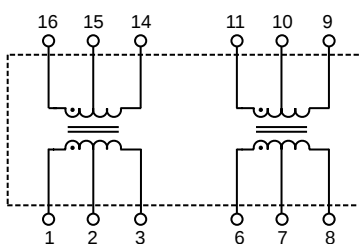
Patented Construction

US Patents: 5,656,985
6,297,721 B1
6,297,720 B1
6,320,489 B1
6,344,785 B1

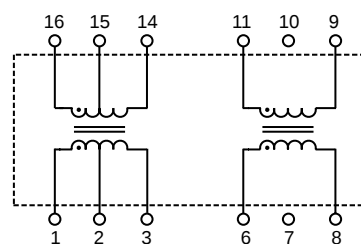


RoHS compliant versions are available.
Specify RoHS compliant product by adding the suffix "RL".

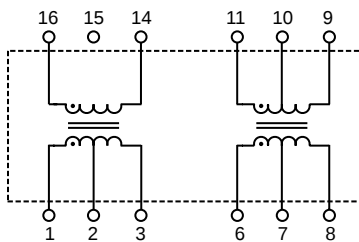
Schematic A



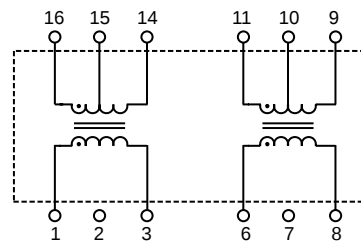
Schematic B



Schematic C



Schematic D



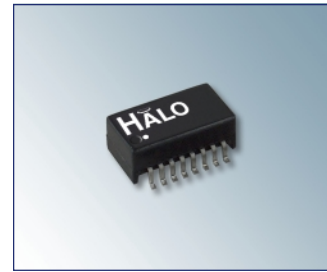
Electrical Specifications @ 25°C

Operating Temp: 0 to +70° C
Isolation Voltage: 1,500 Vrms
Leakage Inductance: 0.4μH Max.
Cw/w: 30pF Max.
Crosstalk (0.1-10MHz): -60dB Typ.
PRI DCR: 0.7ΩMax.

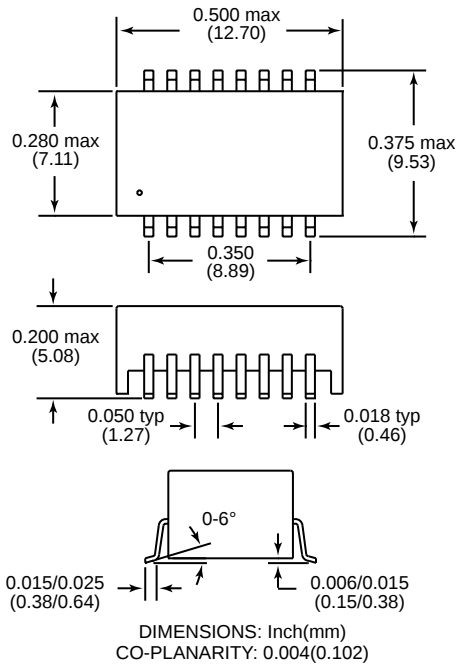
Part Number	Schematic	Turns Ratio PRI : SEC	PRI OCL (mH typ)	Primary Pins
TG08-1205N1	A	1CT:2CT & 1CT:2CT	1.2	1-3 & 6-8
TG24-1205N1	A	1CT:1.36CT & 1CT:1.36CT	1.2	16-14 & 6-8
TG26-1205N1	A	1CT:2CT & 1CT:2CT	1.2	16-14 & 6-8
TG27-1205N1	A	1CT:2CT & 1CT:1.36CT	1.2	16-14 & 6-8
TG38-1205N1	A	1CT:1.15CT & 1CT:1.15CT	1.2	1-3 & 6-8
TG42-1205N1	A	1CT:1.41CT & 1CT:1.41CT	1.2	16-14 & 6-8
TG48-1205N1	B	1CT:2CT & 1:1	1.2	1-3 & 6-8
TG63-1205N1	C	1:1.15CT & 1CT:2CT	1.2	16-14 & 6-8
TG64-1205N1	C	1:1/1.26 & 1CT:2CT	1.2	16-14 & 6-8
TG73-1205N1	A	1CT:2.3CT & 1CT:1CT	1.2	16-14 & 6-8
TG74-1205N1	A	1CT:1CT & 1CT:2CT	1.2	16-14 & 6-8
TG80-1205N1	A	1CT:2.45CT & 1CT:2.45CT	1.2	16-14 & 6-8

HALO Electronics • 1861 Landings Drive, Mountain View, CA 94043 • PH: 650-903-3800
www.halo-electronics.com • info@haloelectronics.com • This Datasheet: [16pinsoic](#) Rev. 4/03

HALO Electronics has developed this standard series of 16 pin SMD, extended temperature range, Line Interface Modules to meet the isolation and impedance match requirements for T1, E1, CEPT and PRI ISDN applications. Non-standard designs are also available. UL1950, IEC950 and EN60950 recognized. To select the correct line interface magnetic device, please refer to the [HALO LIU Selection Guide](#).



N1 Package



Patented Construction

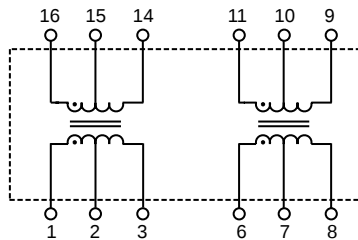
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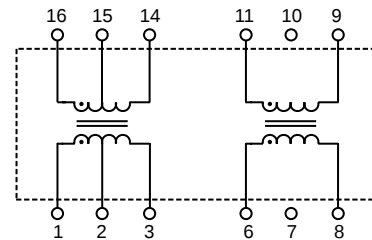
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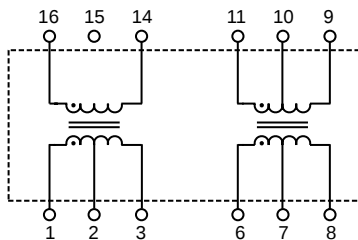
Schematic A



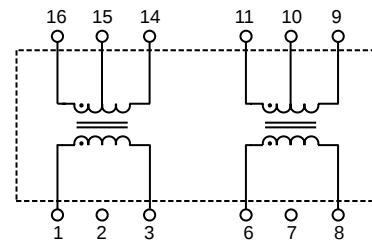
Schematic B



Schematic C



Schematic D



Electrical Specifications @ 25°C

Operating Temp: -40 to +85C
Isolation Voltage: 1,500 Vrms
Leakage Inductance: 0.5μH Max.
Cw/w: 35pF Max.
Crosstalk (0.1-10MHz): -60dB Typ.
PRI DCR: 0.8ΩMax.

Part Number	Schematic	Turns Ratio PRI : SEC	PRI OCL (mH typ)	Primary Pins
TG23-1505N1	D	1:2.42CT & 1:2.42CT	1.5	1-3 & 6-8
TG26-1505N1	A	1CT:2CT & 1CT:2CT	1.5	16-14 & 6-8
TG27-1505N1	A	1CT:2CT & 1CT:1.36CT	1.5	16-14 & 6-8
TG28-1505N1	A	1CT:1CT & 1CT:1.36CT	1.5	16-14 & 6-8
TG35-1505N1	A	1CT:1.15CT & 1CT:1CT	1.5	16-14 & 6-8
TG37-S001N1	A	1CT :1.14CT & 1CT:1.14CT	1.5	16-14 & 6-8
TG42-1505N1	A	1CT:1.41CT & 1CT:1.41CT	1.5	16-14 & 6-8
TG63-1505N1	C	1:1.15CT & 1CT:2CT	1.5	16-14 & 6-8
TG63-S001N1	B	1CT:2CT & 1:1.15	1.5	1-3 & 6-8
TG64-1505N1	C	1:1:1.26 & 1CT:2CT	1.5	16-14 & 6-8
TG74-1505N1	A	1CT:1CT & 1CT:2CT	1.5	16-14 & 6-8
TG91-1505N1	A	1CT:2.4CT & 1CT:1CT	1.5	1-3 & 11-9