

# 10BASE-T Isolation Modules

Dual Port SMD or DIL Package



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:

- Standard series of Dual Port Isolation Modules to meet the isolation requirements of IEEE 802.3
- Designed specifically for use with the “filterless” repeater / switch chips and “stacked” RJ45 connectors.
- Non-standard turns ratios are also available
- SMD parts include patented open frame construction
- 1500Vrms hi-pot

Part Number	Pckg	Turns Ratio $\pm 3\%$		PRI OCL ( $\mu\text{H}$ )	PRI DCR ( $\Omega$ max)	PRI LL ( $\mu\text{H}$ max)	Cw/w ( $\text{pF}$ max)	Temp Range
		PRI/SEC	PRI 1-2, 3-4, 5-6, 7-8					
TD01-1006L1RL	DIL		1:1, 1:1, 1:1, 1:1	100 Typ.	0.3	0.3	12	0 to +70°C
TG01-1006N2LF	SMD		1:1, 1:1, 1:1, 1:1	100 Typ.	0.3	0.3	12	0 to +70°C
TD54-1006L1RL	DIL		1:1.41, 1:1.41, 1:1.41, 1:1.41	140 Typ.	0.4	0.4	15	0 to +70°C
TG54-1006N2LF	SMD		1:1.41, 1:1.41, 1:1.41, 1:1.41	140 Typ.	0.4	0.4	15	0 to +70°C
TD55-1406L1RL	DIL		1:1, 1:1.41, 1:1.41, 1:1	140/140 Typ.	0.4/0.4	0.4	12	0 to +70°C
TG55-1406N2LF	SMD		1:1, 1:1.41, 1:1.41, 1:1	140/140 Typ.	0.4/0.4	0.4	12	0 to +70°C
TD83-2006L1RL	DIL		1:1, 1:2, 1:2, 1:1	200/50 Min.	0.5/0.35	0.15	11	-40 to +85°C
TG83-2006N2LF	SMD		1:1, 1:2, 1:2, 1:1	200/50 Min.	0.5/0.35	0.15	11	-40 to +85°C

## Notes:

1. Please contact the factory or local representative for individual datasheets or additional information
2. DIL (Through-Hole) packages not recommended for new designs
3. Part numbers with LF suffix are RoHS compliant and PB-Free. Part numbers with RL suffix are RoHS compliant using exemption 7a.

## Schematic

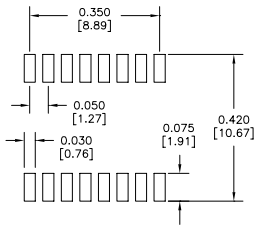


# Reinforced 10BASE-T Isolation Modules

## Package N2

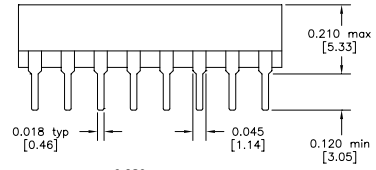


Dimensions: inches [mm]  
Co-Planarity: 0.004 [0.10]



Recommended  
Solder Pad Layout

## Package L1



Dimensions: inches [mm]



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

[www.haloelectronics.com](http://www.haloelectronics.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.