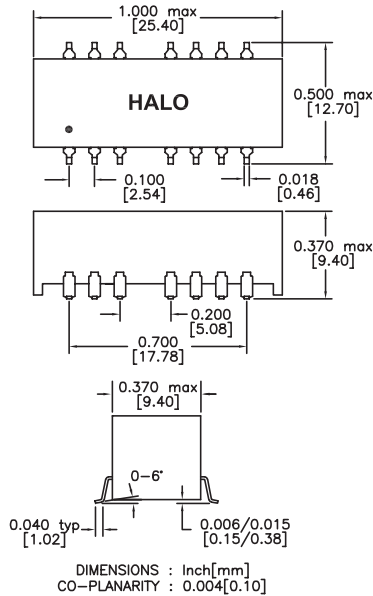


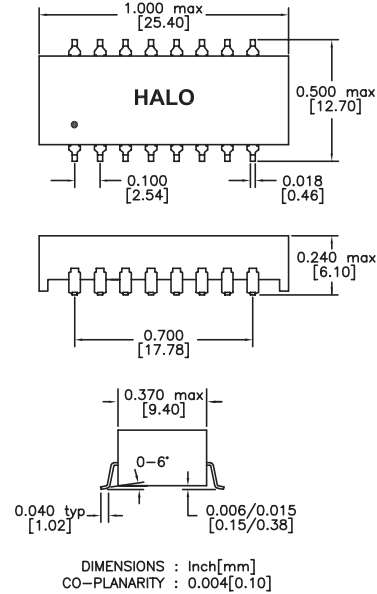
HALO Electronics has developed this standard series of 10/100 Isolation Modules to specifically address the isolation, insertion loss and return loss requirements of IEEE 802.3u. Available in industry standard and low profile packages. Isolation Modules are available for most LAN IC manufacturer's products. To select the correct Isolation Module please refer to the HALO Electronics [10/100 Selector Guide](#).



ND Package



NL Package



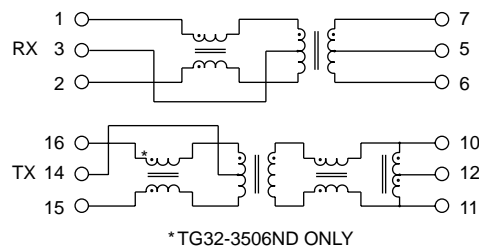
Patented Construction

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

Electrical Specifications @ 25°C

Isolation Voltage:	1,500 Vrms
OCL (100KHz, 0.1Vrms, 8mA):	350 μ H Min.
Leakage Inductance (1MHz):	0.4 μ H Max.
Cw/w:	15 pF Typ.
DCR:	TG22 0.9 Ω Max. TG32 1.0 Ω Max.
Rise Time:	2.5 nS Typ.
Insertion Loss (0.1-100MHz):	-1.1 dB Max.
Cross Talk (0.1-100 MHz):	-38 dB Min.
CMR (0.1-100MHz):	TG22 -40 dB Typ. TG32 -45 dB Typ.

Schematic



Part Number	Turns Ratio		Return Loss			Package
	TX	RX	0.1-40MHz	50MHz	60-80MHz	
TG22-3506ND	1CT:1CT	1CT:1CT	-15.5dB Min.	-13.6dB Min.	-12dB Min.	ND
TG32-3506ND	1CT:1CT	1CT:1CT	-15.5dB Min.	-13.6dB Min.	-12dB Min.	ND*
TG22-3506NL	1CT:1CT	1CT:1CT	-15.5dB Min.	-13.6dB Min.	-10dB Min.	NL

Note: Please contact the factory for detailed data sheets.



PART NO. : TG22-3506NDRL

16PIN SMT 10/100BASE-TX ISOLATION MODULE
IEEE802.3u APPLICATIONS

RoHS COMPLIANT

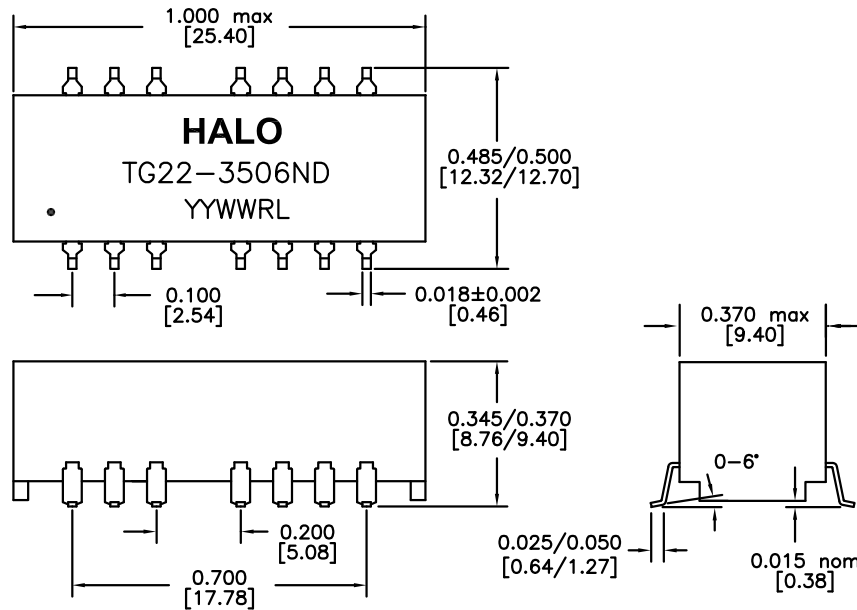
COMPATIBLE TO LEAD-FREE SOLDERING PROCESS
CONDITION PER IPC/JEDEC J-STD-020C

OPERATING TEMPERATURE 0/+70°C

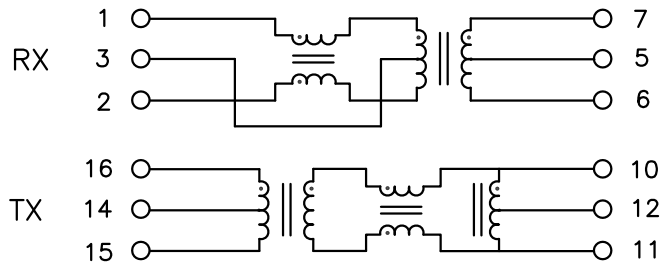
ELECTRICAL SPECIFICATIONS @25°C

TURN RATIO		
TX P16-15:P10-11		1CT:1CT ±3%
RX P1-2:P7-6		1CT:1CT ±3%
OCL (100KHz,0.1Vrms,8mA)		350µH min*
DCR P16-15,P7-6		0.9Ω max
LL (1MHz)		0.4µH max
Cw/w		15pF typ
INSERTION LOSS		
0.1-100MHz		-1.1dB max
RETURN LOSS		
0.5-30MHz		-18dB min
40MHz		-15.5dB min
50MHz		-13.6dB min
60-80MHz		-12dB min
CROSSTALK 0.1-100MHz		-38dB min
CMR 0.1-100MHz		-40dB typ
ISOLATION		1,500Vrms

* Minimum 320µH over -10/+70°C



DIMENSIONS: Inch[mm]
CO-PLANARITY: 0.004[0.10]
TOLERANCES: ±0.005 INCH IF NOT SPECIFIED



HALO/PBL

CALIFORNIA, USA
KOWLOON, HONG KONG
SINGAPORE

TITLE	ISOLATION MODULE		SIGNATURES	DATE	REV.	DESC.	DATE
FOR	10/100BASE-TX		DRAWN LI ZHI ZHONG	4/13/05	A	FIRST ISSUE	4/13/05
PART NO.	TG22-3506NDRL		CHECKED LEI KEONG	1/13/14	B	UPDATE	10/24/05
SCALE	NONE	PAGE 1 OF 2	APPROVED PETER LU	1/13/14	C	PROD. RELEASE	5/19/06
			FILE TG22NDRL.DWG		D	ADD TEMP NOTE	1/13/14

