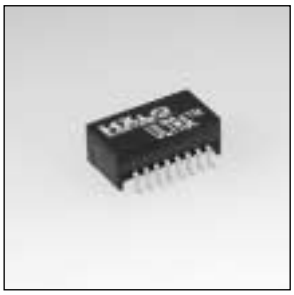
High Speed LAN Selection Guide

HALO offers a complete range of SMD Fast Ethernet and ATM155 solutions. Isolation modules are available for most high speed IC's. The HALO selector guide is provided to help the designer select the correct magnetic device which is compatible with the corresponding silicon vendor.

High Speed Silicon Vendor	Part Number	HALO High Speed SMD Magnetic Solutions ULTRA™ Mini Single Port	Traditional Single Port	Dual Port 40 Pin Package	Quad Port 40 Pin Quatra™
Adhoc Tech.	AH101/4*	TG110-S050N2	TG22-3506ND	TG110-S025NX	TG110-S450NX
AMD	79C873	TG110-S050N2	TG22-3506ND	TG110-S025NX	TG110-S450NX
AMD	79C874/5*	TG110-S050N2	TG22-3506ND	TG110-S025NX	TG110-S450NX
AMD	79C973/5	TG110-S141N2	TG22-S143ND	TG110-S241NX	TG110-S443NX
Broadcom	BCM5201/3/5	TG110-S050N2	TG22-S012ND	TG110-3506NX	TG110-6506NX
Broadcom	BCM5208/16	TG110-S050N2	TG22-3506ND	TG110-S025NX	TG110-S450NX
Crystal	CS8952	TG110-S050N2	TG22-3506ND	TG110-S025NX	TG110-S450NX
Davicom	DM9101	TG110-S050N2	TG22-3506ND	TG110-S025NX	TG110-S450NX
Enable	EL40C331	TG110-S050N2	TG22-3506ND	TG110-S025NX	TG110-S450NX
ICS	ICS1890/1/3	TG110-S050N2	TG22-3506ND	TG110-3506NX	TG110-6506NX
Level One	LXT970/971	TG110-S050N2	TG22-S012ND	TG110-S025NX	TG110-S450NX
Level One	LXT974/5	TG110-S120N2	-	TG110-S220NX	TG110-S420NX
Level One	LXT976X/978X	TG110-S050N2	TG22-3506ND	TG110-S025NX	TG110-S453NX
Level One	LXT980/2/3	TG110-S120N2	-	TG110-S220NX	TG110-S420NX
Lucent	LU3X31/LU3X51	TG110-S050N2	TG22-3506ND	TG110-S025NX	TG110-S450NX
Lucent	LU3X34FT	TG110-S050N2	TG22-3506ND	TG110-3506NX	TG110-6506NX
µLinear	ML6673	TG110-S050N2	TG22-3506ND	TG110-3506NX	TG110-6506NX
µLinear	ML6692/3/4	-	TG110-S045ND	TG110-S046NX	-
Mitel	NWK914D	TG110-S050N2	TG22-3506ND	TG110-3506NX	TG110-6506NX
Mitel	NWK937/939/954	TG110-S050N2	TG22-3506ND	TG110-3506NX	TG110-6506NX
NSC	DP83223/843	TG110-S050N2	TG22-3506ND	TG110-3506NX	TG110-6506NX
Quality	QS6611/	TG110-S131N2	TG22-S131ND	TG110-S231NX	TG110-S431NX
Quality	QS6612	TG110-S139N2	TG22-S139ND	TG110-S239NX	TG110-S438NX
Seeq	80C220/1	TG110-S120N2	-	TG110-S220NX	TG110-S420NX
Seeq	80223/84220	TG110-S050N2	TG22-3506ND	TG110-3506NX	TG110-6506NX
SMSC	LAN83C180/183	TG110-S050N2	TG22-3506ND	TG110-3506NX	TG110-6506NX
TDK	78Q2120/1	TG110-S050N2	TG22-3506ND	TG110-3506NX	TG110-6506NX
T.I.	TNETE2101	TG110-S050N2	TG22-3506ND	TG110-3506NX	TG110-6506NX

** Optional solutions are available for low power applications. Please consult the factory.*

HIGH SPEED LAN

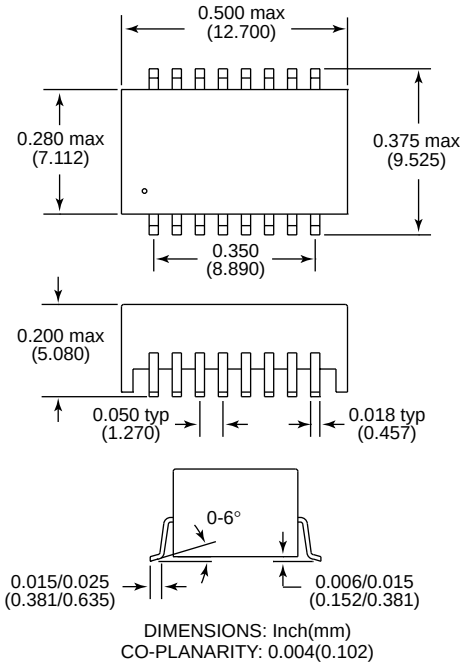


"New" ULTRA™ Series, 16 Pin SOIC 10/100BASE-TX Magnetic Modules

HALO ELECTRONICS, INC.

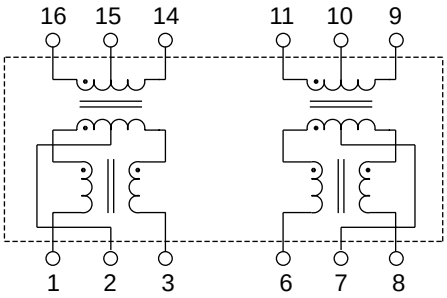
HALO Electronics has developed the ULTRA™ series of 16 pin SOIC Isolation Modules to meet the requirements of IEEE 802.3 for 10/100BASE-TX and ATM155 applications. Designed to provide a significant real estate reduction at the lowest price. Standard devices available for all Phy's. Please see the attached selector guide to select the correct device for the corresponding Phy.

SOIC 16 Package

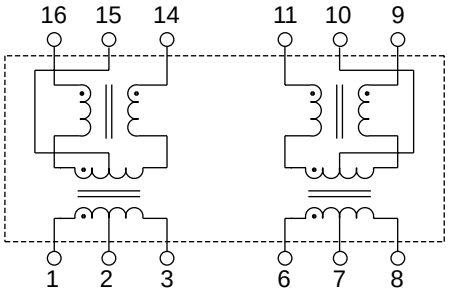


DIMENSIONS: Inch(mm)
CO-PLANARITY: 0.004(0.102)

Schematic A



Schematic B



Electrical Specifications @ 25°C

Isolation:	1,500Vrms
OCL@100KHz, 8mA:	350µH min
CMR (0.1-100MHz):	-40dB typ
Crosstalk (0.1-100MHz):	-40dB min

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

Part Number	Turns Ratio ±3% (1-3:16-14) / (6-8:11-9)	Circuit Diagram	PRI/SEC Cw/w (pF typ)	PRI L_L (µH max)	PRI DCR (Ω max)
TG110-S050N2	(1CT:1CT) / (1CT:1CT)	A	15	0.4	1.5
TG110-S055N2	(1CT:1CT) / (1CT:1CT)	B	15	0.4	1.5
TG110-S120N2	(2CT:1CT) / (1CT:1CT)	B	15	1.2	0.9
TG110-S125N2	(1CT:1CT) / (2CT:1CT)	B	15	1.2	0.9
TG110-S131N2	(√2CT:1CT) / (1CT:1CT)	B	15	0.9	0.9
TG110-S139N2	(1.25CT:1CT) / (1CT:1CT)	B	15	0.9	0.9
TG110-S141N2	(1CT: √2CT) / (1CT:1CT)	B	15	0.4	0.9