

1000BASE-T ETHERNET SINGLE PORT TRANSFORMER MODULES

- For Use with Transceivers Requiring 1:1 Transmit and Receive Turns Ratio
- Compliant with IEEE 802.3ab standard for 100/1000BASE-T Including 350uH min. OCL with 8mA DC bias
- Designed to support 4 pairs of category 5 UTP cable

1000BASE-T ETHERNET TRANSFORMER MODULES SELECTION

IC Manufacturer	IC Part Number	Ports	Comments	UMEC Transformers
Broadcom	BCM5400, BCM5401	1	PHY	UT12014, UT12014A
Cicada Semiconductor	CIS8204	1	PHY	UT12014, UT12014A
Lucent Technologies	LU8X31, LU8X32	1	---	UT12014, UT12014A
Marvell Semiconductor	88E1000, 88E1000S 88E1010, 88E1010S 88E1020, 88E1020S 88E1040, 88E1040S 88E1041, 88E1041S 88E1042, 88E1042S	1	MAC/PHY	UT12014, UT12014A
	88E1011	1	MAC/PHY	UT12014, UT12014A UT12015
National Semiconductor	DP83891, DP83861	1	PHY	UT12014, UT12014A

DATA SHEET 07-12 JUL/06
1 OF 2



UNIVERSAL MICROELECTRONICS CO.,LTD.
TEL:886-4-23590096 FAX:886-4-23590129

3,27TH RD.,TAICHUNG INDUSTRIAL PARK,
TAICHUNG,TAIWAN,R.O.C

1000BASE-T ETHERNET SINGLE PORT TRANSFORMER MODULES

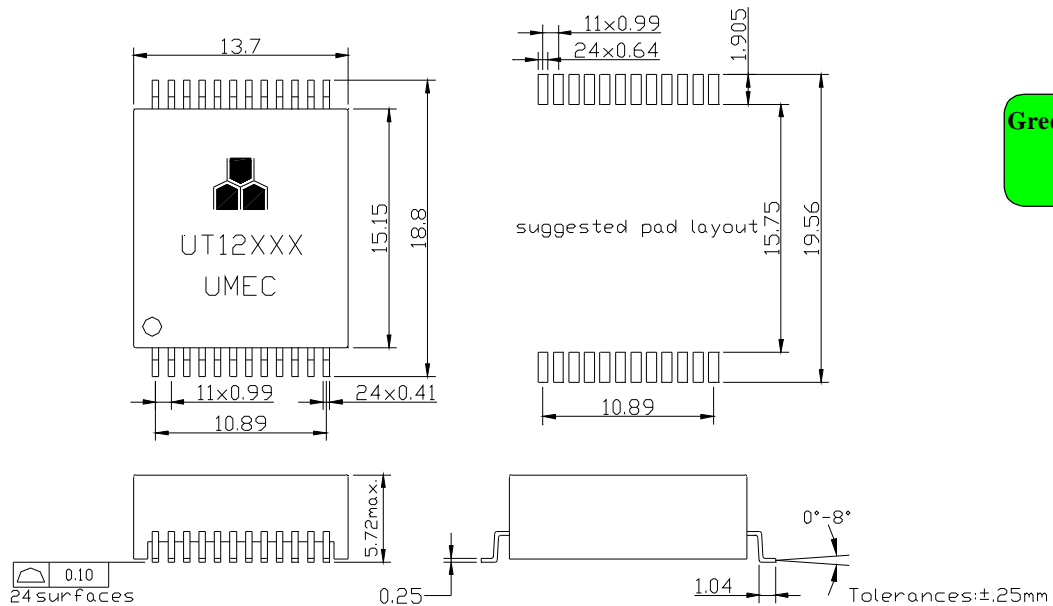
ELECTRICAL SPECIFICATIONS @25°C --- Operating Temperature 0°C to 70°C

Model No.	Insertion Loss (dB Max.)	Return Loss (dB Min. @ 100Ω)					Cross Talk (dB Min.)			Common to Common Rejection Ration (dB Min.)	Hi-pot (Vrms)
		1-100MHz	1-30MHz	40MHz	50MHz	60-80MHz	100MHz	30MHz	60MHz		
UT12014	-1.0	-18	-18	-16	-12	-10	-45	-40	-35	-35	1500
UT12014A	-1.0	-18	-18	-16	-12	-10	-45	-40	-35	-35	1500
UT12015	-1.0	-18	-18	-16	-12	-10	-45	-40	-35	-35	1500

Note: UT12014A Operating Temperature -40°C to +85°C

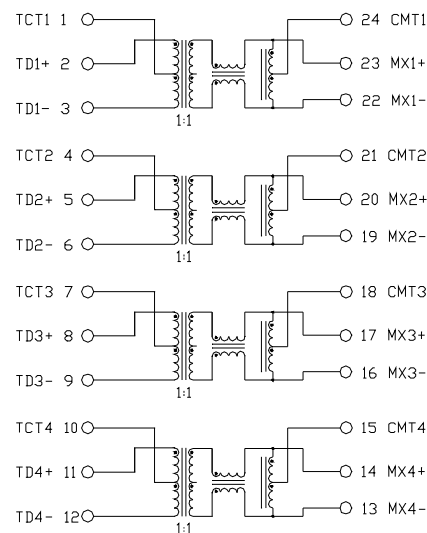
For RoHS compliant products, the Ordering Code: TG-Model No. ex. TG-UT12014

Mechanical

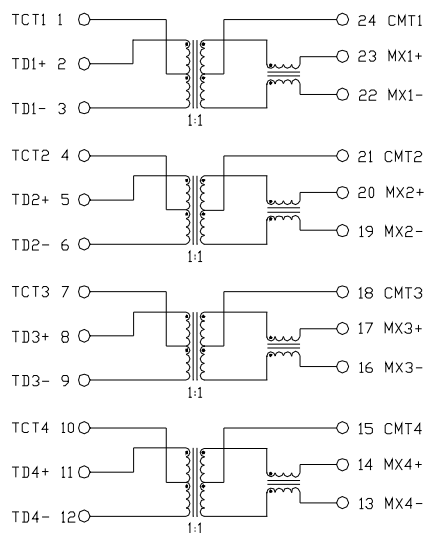


Schematics

UT12014/UT12014A



UT12015



DATA SHEET 07-12 JUL/06
2 OF 2



UNIVERSAL MICROELECTRONICS CO.,LTD.
TEL:886-4-23590096 FAX:886-4-23590129

3,27TH RD.,TAICHUNG INDUSTRIAL PARK,
TAICHUNG,TAIWAN,R.O.C