

Single Channel Interface For 10/100Mbps Ethernet
Applications with CMC's tuned to enhance EMC system performance.

Compliant With IEEE802.3 And ANSI X326 Standard Including Baseline Wander
Compensation Specification Of 350uH OCL When Biased at 8mA From 0°C to 70°C.

Compatible With Various 10/100TX Transceiver Requiring 1:1 Transmit and Receive Turns Ratio.

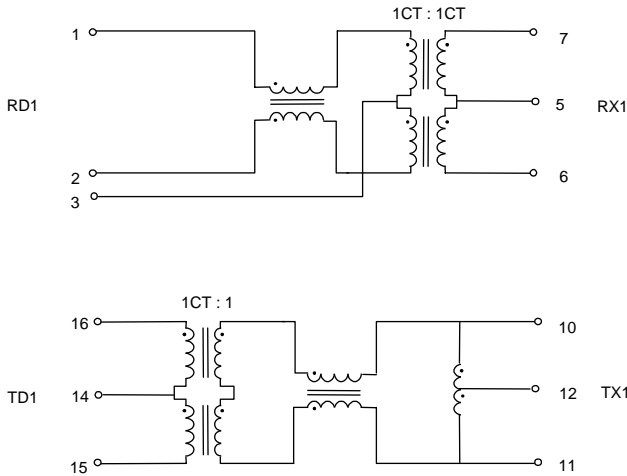
ELECTRICAL SPECIFICATIONS @ 25°C

Part Number	Insertion Loss (dB max)	Return Loss (dB min)				CMRR (dB min)			Crosstalk (dB min)			SCHEMATICS / PACKAGE
		1-100MHz	1-30MHz	60MHz	80MHz	1-30MHz	60MHz	80-100MHz	1-30MHz	60MHz	80-100MHz	
TH1051D	-1	-16	-12	-10	-42	-38	-35	-42	-38	-35	S1 / P1	
TH1251P	-1	-16	-12	-10	-42	-38	-35	-42	-38	-35	S1 / P2	
TH1052D	-1	-16	-12	-10	-42	-38	-35	-42	-38	-35	S2 / P1	
TH1252P	-1	-16	-12	-10	-42	-38	-35	-42	-38	-35	S2 / P2	
TH1043D	-1	-16	-12	-10	-42	-38	-35	-42	-38	-35	S3 / P1	
TH1243P	-1	-16	-12	-10	-42	-38	-35	-42	-38	-35	S3 / P2	
TH1034D	-1	-16	-12	-10	-40	-37	-35	-40	-38	-35	S4 / P1	
TH1234P	-1	-16	-12	-10	-40	-37	-35	-40	-38	-35	S4 / P2	
TH1144D	-1	-18	-12	-10	-45	-40	-35	-42	-40	-38	S5 / P1	
TH1344P	-1	-18	-12	-10	-45	-40	-35	-42	-40	-38	S5 / P2	
TH1145D	-1	-18	-12	-10	-45	-40	-35	-42	-40	-38	S6 / P1	
TH1345P	-1	-18	-12	-10	-45	-40	-35	-42	-40	-38	S6 / P2	
TH1146D	-1	-18	-12	-10	-45	-40	-35	-42	-40	-38	S7 / P1	
TH1346P	-1	-18	-12	-10	-45	-40	-35	-42	-40	-38	S7 / P2	
TH1343P	-1	-18	-12	-10	-45	-40	-35	-42	-40	-38	S8 / P2	
TH1242P	-1	-18	-12	-10	-45	-40	-35	-42	-40	-38	S9 / P2	

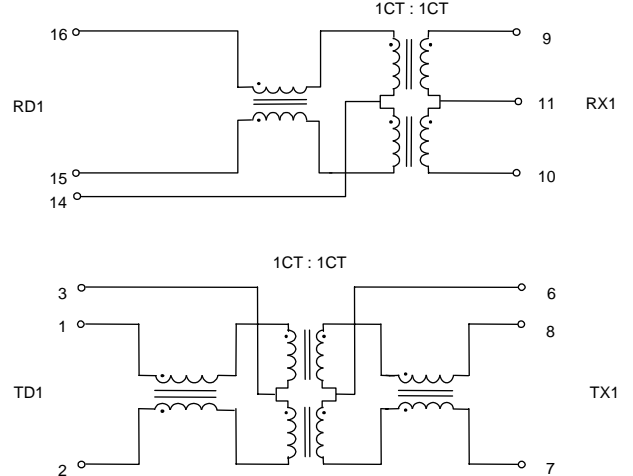
All models meet Isolation Voltage (Hi-Pot) of 1500Vrms (1 min)
Operating Temperature : 0°C - 70°C

SCHEMATICS

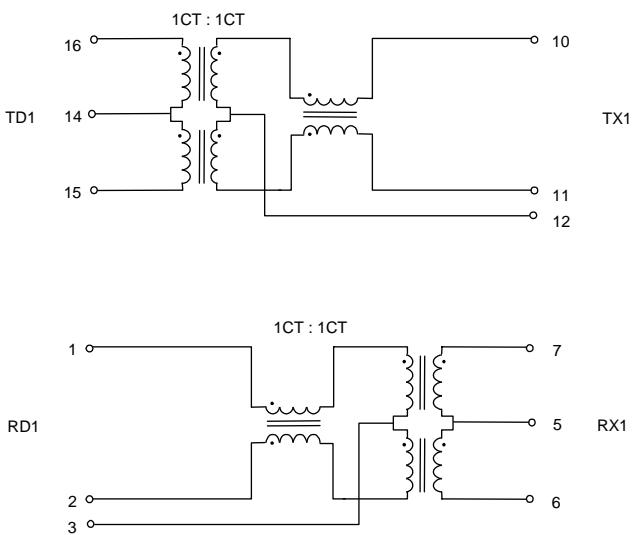
S 1



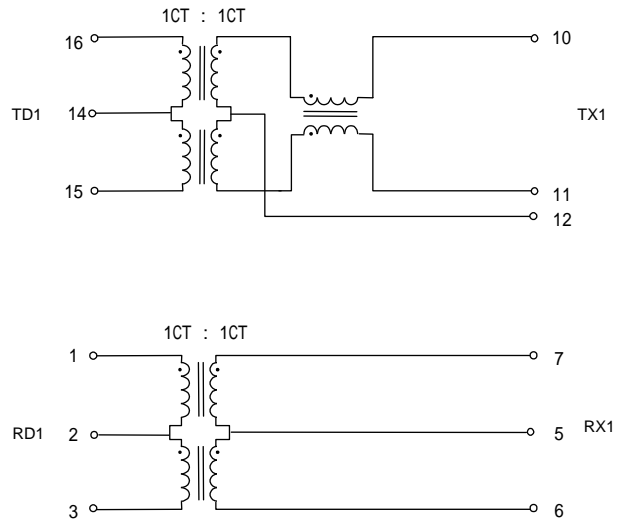
S 2



S 3



S 4



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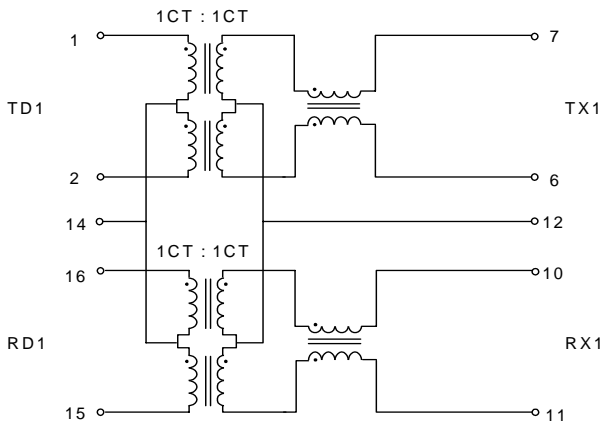
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1.1.2

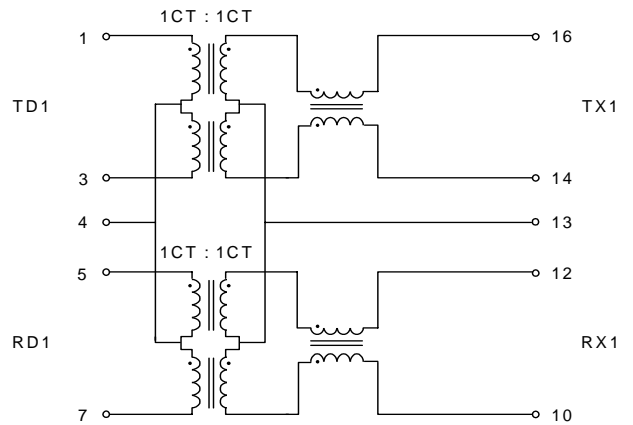
**10/100 Base-T
Transformer Modules**

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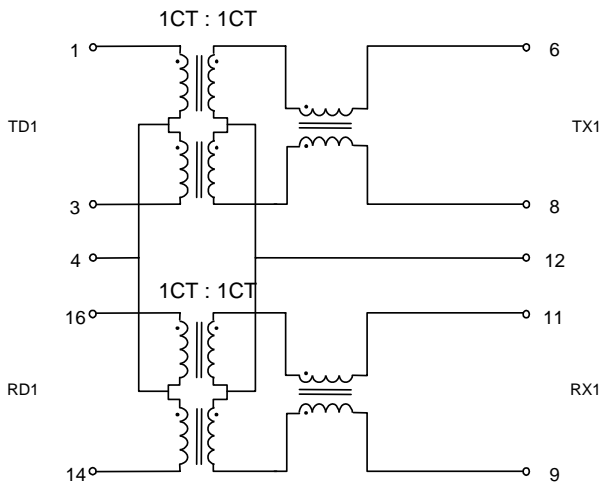
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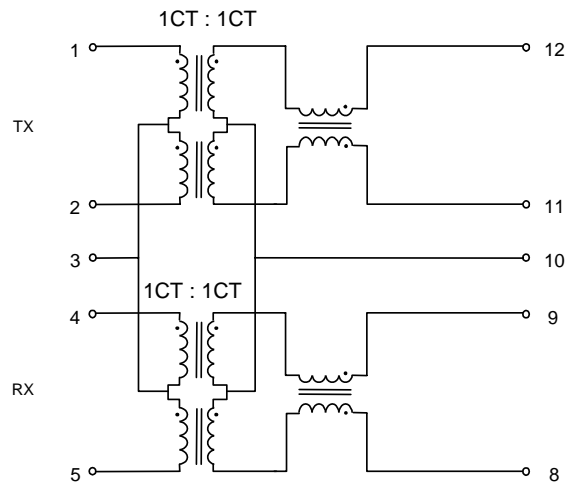
S 6



S 7



S 8



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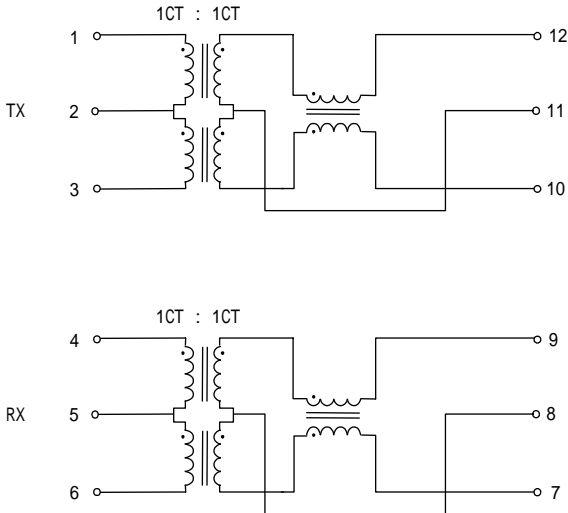
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1.1.3

**10/100 Base-T
Transformer Modules**

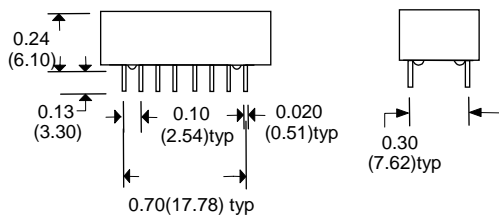
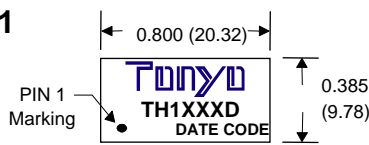
SCHEMATICS (Continued)

S 9



MECHANICAL SPECIFICATIONS

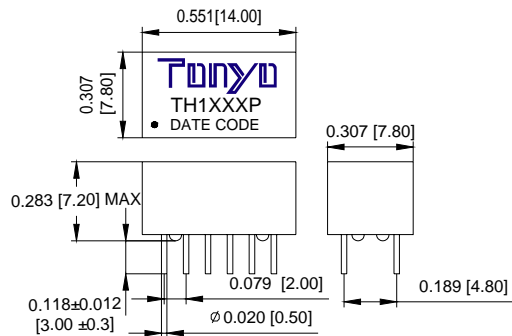
P 1



TH1051D : PIN 4 & 13 OMITTED
PIN 8 & 9 NO CONNECTION
TH1052D : PIN 4, 5, 12 & 13 OMITTED
TH1053D : PIN 4, 8, 9 & 13 OMITTED
TH1054D : PIN 4, 8, 9 & 13 OMITTED

TH1144D : PIN 3, 4, 5 & 13 OMITTED
PIN 8 & 9 NO CONNECTION
TH1145D : PIN 2, 6, 11 & 15 OMITTED
PIN 8 & 9 NO CONNECTION
TH1146D : PIN 2, 5, 7, 10, 13 & 15 OMITTED

P 2



Units: inch [mm] Tolerances: xx.x±0.010 [0.25]
0.xx±0.002 [0.05]

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1.1.4

**10/100 Base-T
Transformer Modules**

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Single Channel Interface For 10/100Mbps Ethernet Applications with CMC's tuned to enhance EMC system performance.

Compliant With IEEE802.3 And ANSI X326 Standard Including Baseline Wander Compensation Specification Of 350uH OCL When Biased at 8mA From 0°C to 70°C.

Low Profile Surface Mount Packaging Designed For Hi-Temp Reflow Process (225C peak).

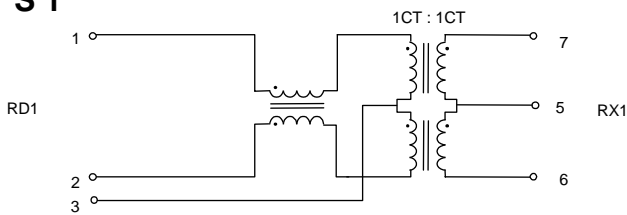
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ELECTRICAL SPECIFICATIONS @ 25°C

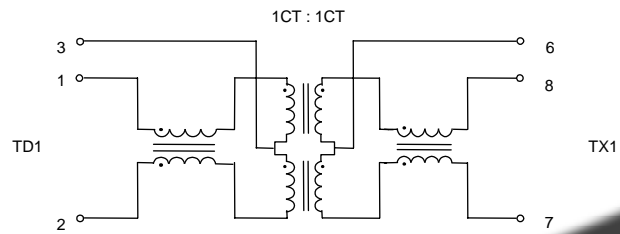
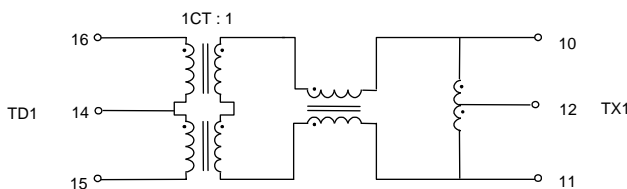
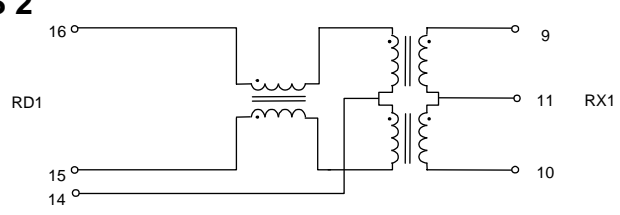
Part Number	Insertion Loss	Return Loss				CMRR			Crosstalk			SCHEMATICS / PACKAGE
	(dB max)	(dB min)				(dB min)			(dB min)			
	1-100MHz	1-30MHz	60MHz	80MHz	1-30MHz	60MHz	80-100MHz	1-30MHz	60MHz	80-100MHz		
TH1451F	-1	-16	-12	-10	-42	-38	-35	-42	-38	-35	S1 / P1	
TH1452F	-1	-16	-12	-10	-42	-38	-35	-42	-38	-35	S2 / P1	
TH1443F	-1	-16	-12	-10	-42	-38	-35	-42	-38	-35	S3 / P1	
TH1445F	-1	-16	-12	-10	-42	-38	-35	-42	-38	-35	S4 / P2	
TH1436F	-1	-16	-12	-10	-40	-37	-35	-42	-38	-35	S5 / P2	
TH1641S	-1.1	-16	-12	-10	-40	-35	-35	-42	-38	-35	S6 / P3	
TH1642S	-1.3	-16	-12	-10	-40	-35	-35	-42	-38	-35	S7 / P4	
TH1643S	-1.1	-16	-12	-10	-40	-35	-35	-42	-38	-35	S6 / P5	

All models meet Isolation Voltage (Hi-Pot) of 1500Vrms (1 min)
Operating Temperature : 0°C - 70°C

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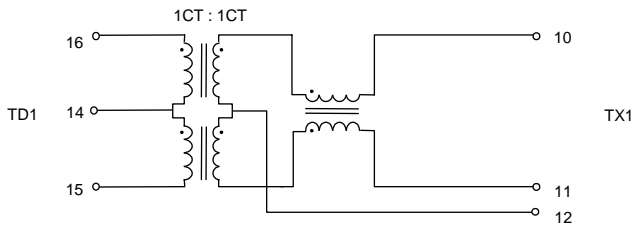


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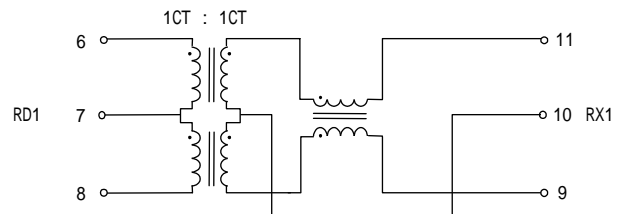
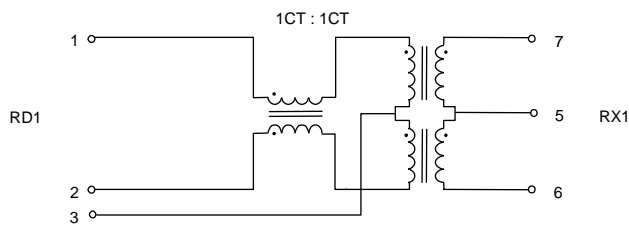
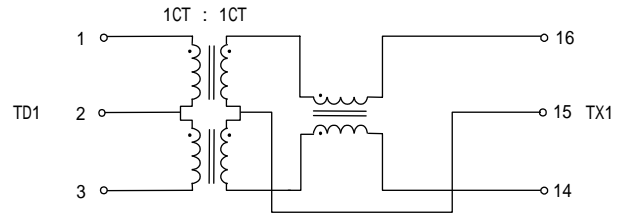


SCHEMATICS

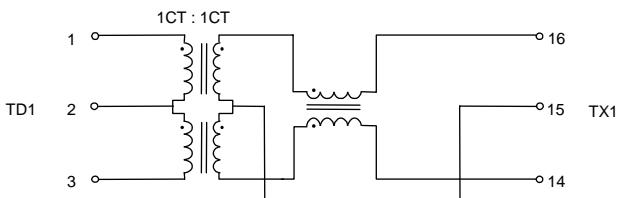
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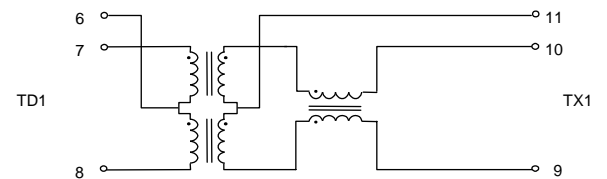
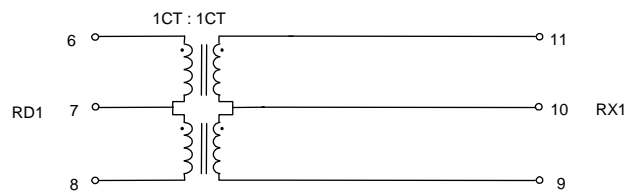
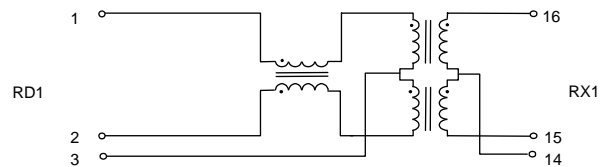
S 4



S 5



S 6



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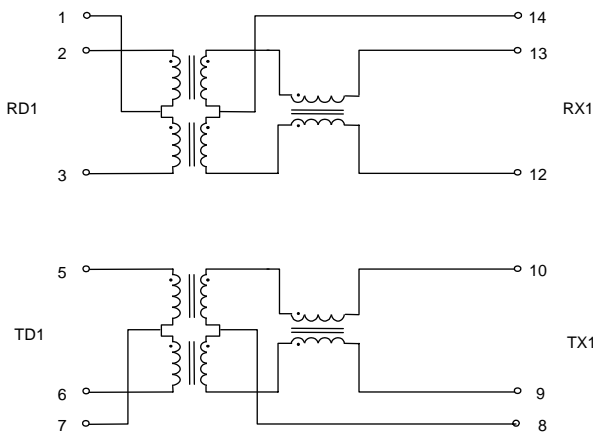
**10/100 Base-T
Transformer Modules**

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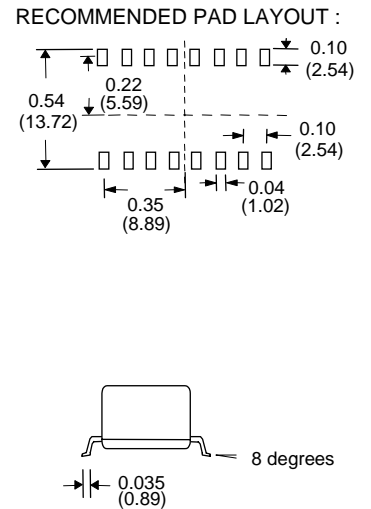
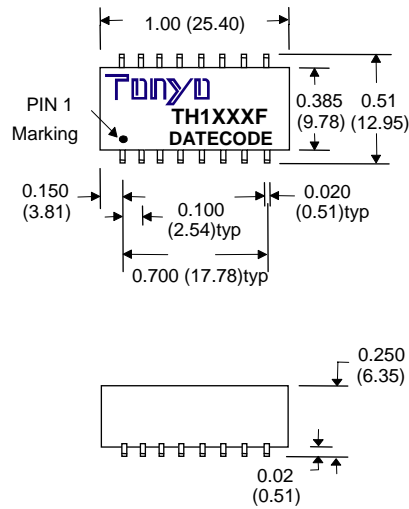
SCHEMATICS (Continued)

MECHANICAL SPECIFICATIONS

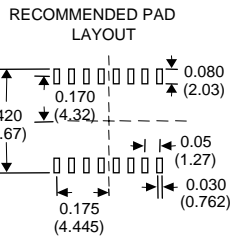
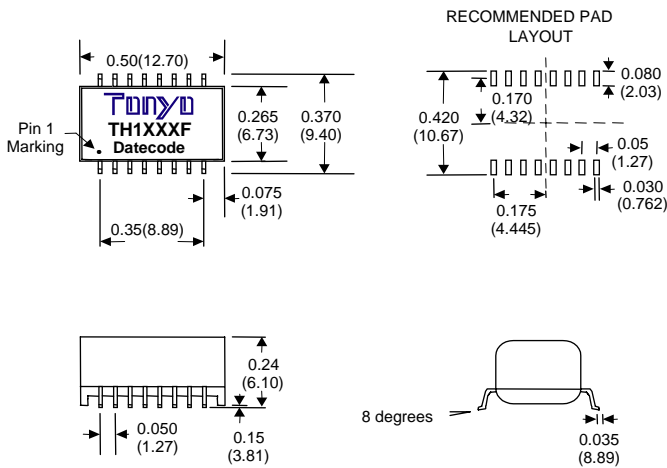
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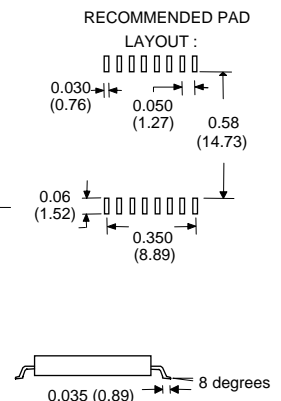
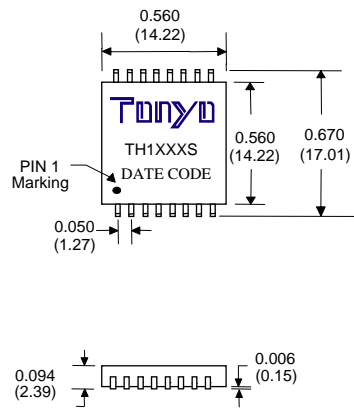
P 1



P 2



P 3



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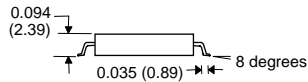
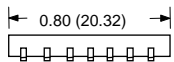
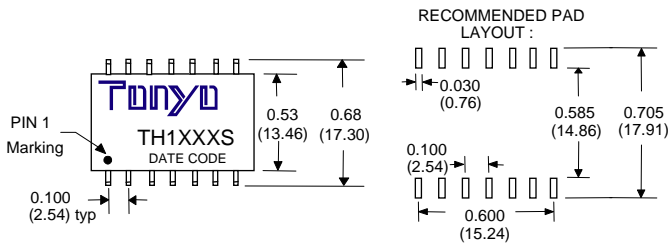
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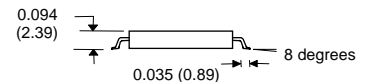
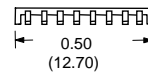
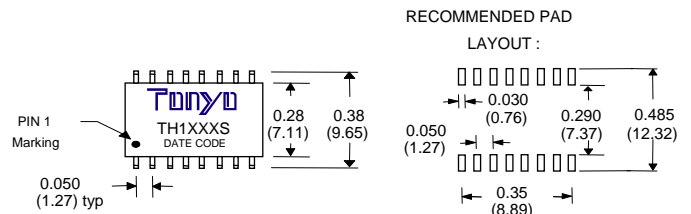
1.1.7

MECHANICAL SPECIFICATIONS

P 4



P 5



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1.1.8

10/100 Base-T Transformer Modules

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