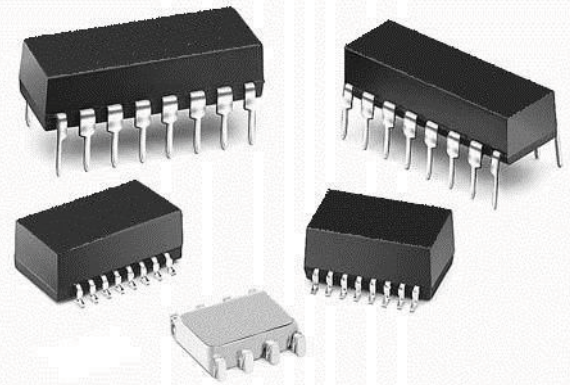


# 10Base-T Isolation Transformers

Link-PP Int'l Technology

- ✧ For Adaptor Cards, Mous, Hubs, and Motherboard applications
- ✧ Designed to meet or exceed IEEE802.3. 10Base-T specifications
- ✧ Available With Common Mode Chokes for EMI Suppression
- ✧ SMT, THT, DIP etc Package
- ✧ For RoHS part add suffix NL
- ✧ RoHS NL peak solder rating 235°C



## Electrical Specifications @25°C---Operating Temperature 0°C to 70°C

Part Number	Turns Ratio (±5%)		Primary Pins	Common Mode Choke	Sine Wave Inductance OCL <sup>1</sup> (uH MIN)	Interwinding Capacitance C <sub>ww</sub> <sup>1</sup> (pF MAX)	Leakage Inductance LL <sup>1</sup> (μ H MAX)	DCR (Ω MAX)	Hipot (Vrms)	Schem .	Mech.
	Transmit	Receive									
<b>Surface Mount</b>											
LP114SM	1CT:1CT	1CT:1CT	1-3/6-8		200	12	0.3	0.3	2000	D	SMT5
LP128SM	1CT:1.414CT	1CT:1CT	6-8/1-3		200	15	0.5	0.4	2000	D	SMT5
LP356SM	1CT:1.414CT	1CT:1CT	6-8/1-3	X	200	12	0.5	0.6	2000	G	SMT5
LP435SM	2CT:1CT	1CT:1CT	1-3/6-8		100	10	0.4	0.5	2000	D	SMT5
LP467SM	1CT:2CT	1CT:1CT	6-8/1-3	X	140	12	0.2	0.6	2000	G	SMT5
LP2023	1CT:2.5CT	1CT:1CT	6-8/1-3	X	200	15	0.5	0.4	2000	J	SMT4
LP4001	1CT:2CT	1CT:1CT	6-8/1-3	X	112	8	0.3	0.8	3000	E	SMT4
LP4005	1CT:2.5CT	1CT:1CT	6-8/1-3	X	200	10	0.4	0.5	1500	J	SMT4
LP5017	1CT:1CT	1CT:1CT	1-3/6-8	X	200	10	0.25	1.0	1500	F	SMT4
LP2024 <sup>2</sup>	1CT:2.5CT	1CT:1CT	6-8/1-3	X	350	30	0.8	0.6	2000	J	SMT4
LP85454	1:1.414	1:1	3-4/1-2		140	12	0.2	0.4	2000	A	SMT2
LP85726	1CT:1CT	1CT:1CT	1-3/6-8		200	10	0.2	0.3	2000	D	SMT4
LP85745	1CT:1.414CT	1CT:1CT	6-8/1-3		140	12	0.2	0.3	2000	D	SMT4
LP88023	1CT:2CT	1CT:1CT	1-3/6-8	X	200	12	0.3	1.0	1500	F	SMT4
LP88041	1CT:2CT	1CT:1CT	6-8/1-3		112	8	0.3	0.5	1500	D	SMT4
LP88042	2.828CT:1	1:1	2-4/7-9		200	14	1	0.5	1500	I	SMT1
LP88048	1CT:1.414CT	1CT:1CT	6-8/1-3	X	110	15	0.4	1.0	1500	E	SMT4
LP88052	2CT:1CT	1CT:1CT	1-3/6-8	X	140	12	0.3	1.0	1500	F	SMT4
LP88810	---	1:1(4X)	1-2/3-4		140	12	0.2	0.4	2000	C	SMT4
LP88820	1:1.414(4X)	---	1-2/3-4 5-6/7-8		140	12	0.2	0.4	2000	C	SMT4
<b>Through Hole</b>											
LP128	1CT:2CT	1CT:1CT	6-8/1-3		140	15	0.5	0.4	2000	D	TH3
LP435	2CT:1CT	1CT:1CT	1-3/6-8		80	10	0.4	0.5	2000	D	TH3
LP85263	1CT:1CT	1CT:1CT	1-3/6-8		200	15	0.25	0.3	2000	D	TH4

- NOTES: 1. OCL, C<sub>ww</sub> and LL are measured at 20 mVrms, 100 kHz.  
 2. Extended temperature parts -40°C to 85°C, electrical specifications@ 25°C.

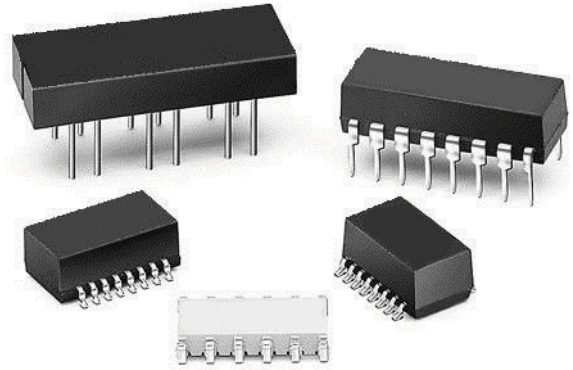
## Electrical Specifications @25°C---Operating Temperature 0°C to 70°C

Part Number	Insertion Loss 1 to 10 MHz (dB MAX)	Attenuation (dB MIN)				Return Loss 1 to 10 MHz 100 Ω ± 15 Ω (dB MIN)	Crosstalk 1 to 30 MHz (dB MIN)	Common Mode Rejection (dB MIN)		Schem.	Mech.
		30-50MHz		50-100MHz				50MHz	100MHz		
		TX	RX	TX	RX						
LP85433	-1.0	-30	-15	-35	-20	-15	-30	-35	-30	K	TH5

# Isolation Transformers For Ethernet

Link-PP Int'l Technology

- ✘ For Ethernet AUI Transformers
- ✘ Low leakage inductance and coupling capacitance for faster rise times
- ✘ SMT, DIP package
- ✘ For RoHS Parts add Suffix NL
- ✘ RoHS NL peak solder rating 235°C



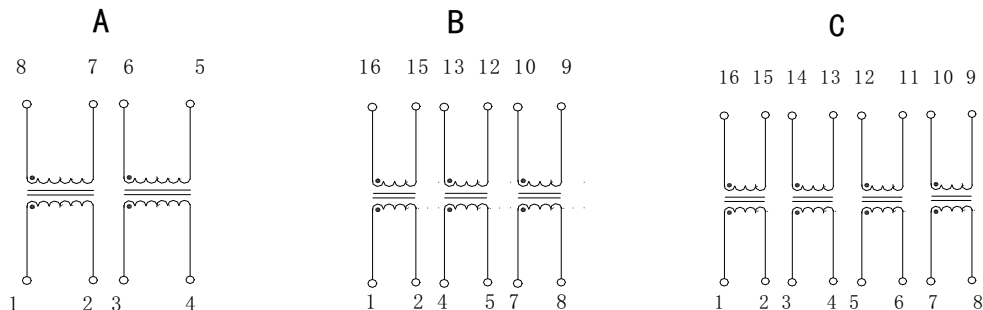
## Electrical Specifications @25 °C---- Operating Temperature 0°C to 70°C

Part Number	Turns Ratio (±2%)	Primary Pins	Primary Sine Wave OCL (μH ±20%)	Primary ET-Constant (V-μs MIN)	Rise Time (ns MAX)	Interwinding Capacitance C <sub>ww</sub> (pF MAX)	Leakage Inductance L <sub>L</sub> (uH MAX)	DCR (Ω MAX)	Schem.	Mech.	Hipot (Vrms)
<b>SURFACE MOUNT</b>											
LP90SM	1:1	1-2/4-5/7-8	75	2.4	3.0	10	0.20	0.20	B	SMT5	2000
LP91SM	1:1	1-2/4-5/7-8	100	2.4	3.0	10	0.20	0.30	B	SMT5	2000
LP108SM	1:1	1-2/4-5/7-8	350	2.5	3.5	16	0.30	0.35	B	SMT5	2000
LP6002	1:1	1-2/4-5/7-8	40(MIN)	2.1	3.0	8	0.20	0.25	B	SMT4	2000
LP85723	1:1	1-2/4-5/7-8	75	1.8	3.0	8	0.20	0.30	B	SMT4	2000
LP85727	1:1	1-2/4-5/7-8	150	1.2	3.0	12	0.20	0.30	B	SMT4	2000
LP85728	1:1	1-2/4-5/7-8	100	1.8	3.0	9	0.20	0.30	B	SMT4	2000
LP88801	1:1	1-2/3-4/5-6	75	1.8	3.0	12	0.20	0.30	H	SMT3	2000
<b>THROUGH HOLE</b>											
LP84102	1:1	1-2/4-5/7-8	75	2.1	3.0	10	0.20	0.20	B	TH4	500
LP84103	1:1	1-2/4-5/7-8	100	2.1	3.0	10	0.20	0.30	B	TH4	500
LP84104	1:1	1-2/4-5/7-8	150	2.1	3.5	12	0.20	0.30	B	TH4	500
LP84107	1:1	1-2/4-5/7-8	75	2.4	3.5	10	0.25	0.30	B	TH2	2000
LP84108	1:1	1-2/4-5/7-8	100	2.1	3.5	10	0.25	0.40	B	TH2	2000
LP84109	1:1	1-2/4-5/7-8	150	3.0	3.0	15	0.20	0.45	B	TH2	2000
LP84502	1:1	1-2/4-5/7-8	75	2.1	3.0	10	0.20	0.20	B	TH4	2000
LP84503	1:1	1-2/4-5/7-8	100	2.1	3.0	10	0.20	0.30	B	TH4	2000

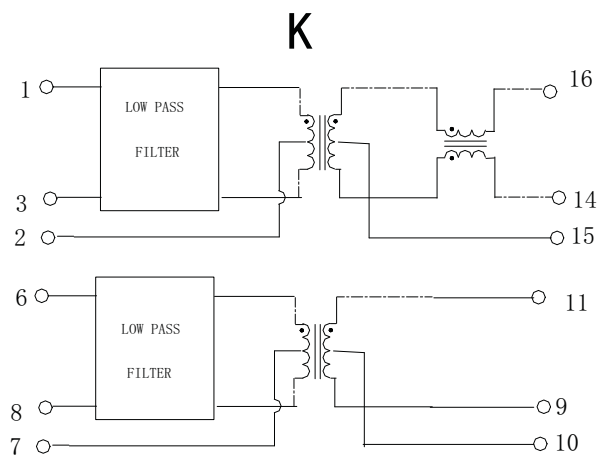
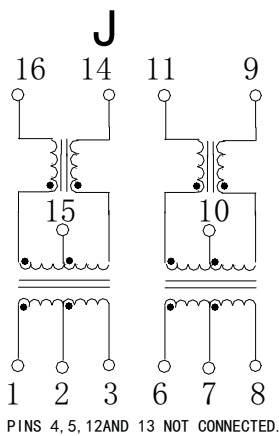
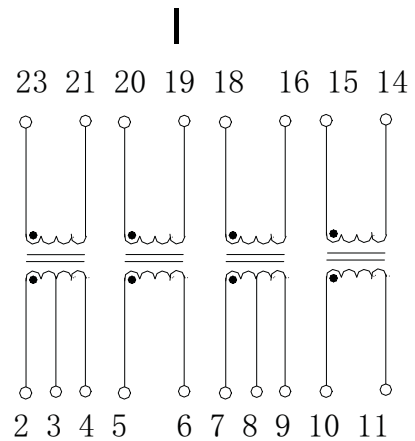
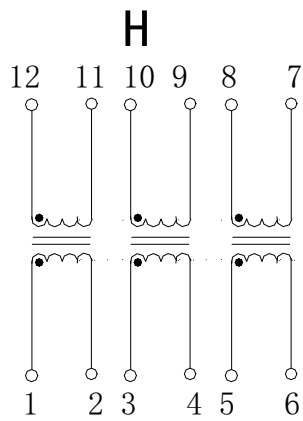
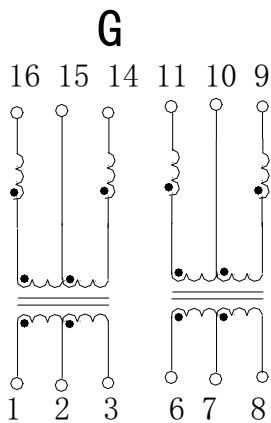
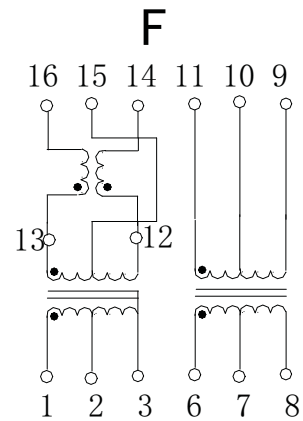
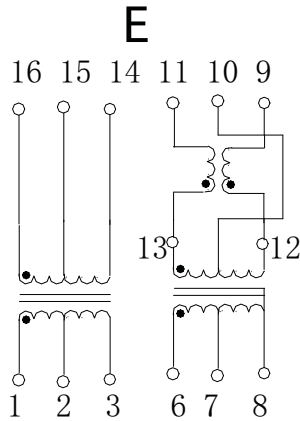
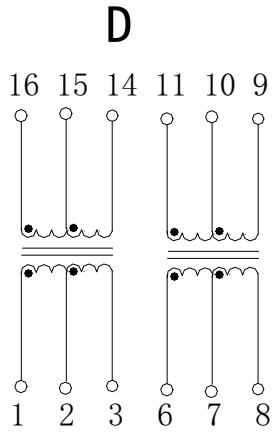
**NOTES:**

1. OCL, C<sub>ww</sub> and L<sub>L</sub> are measured at 20 mVrms, 100 kHz.
2. Rise time is measured in 75 Ω systems.

## Schematics

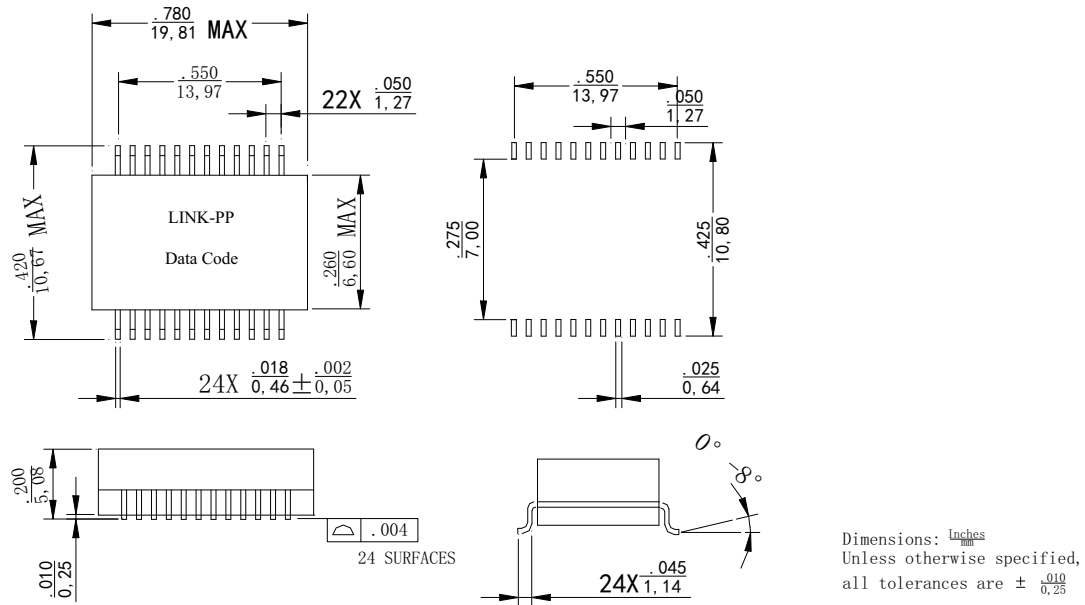


## Schematics (continued)

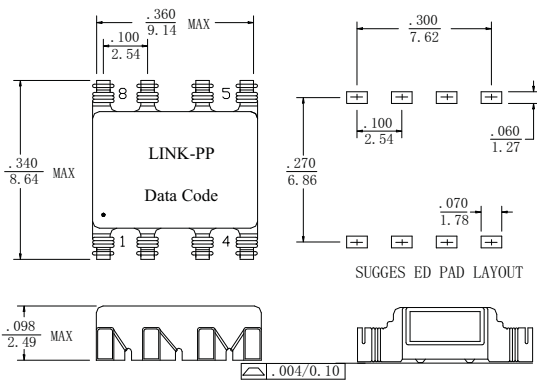


## Surface Mount Mechanicals

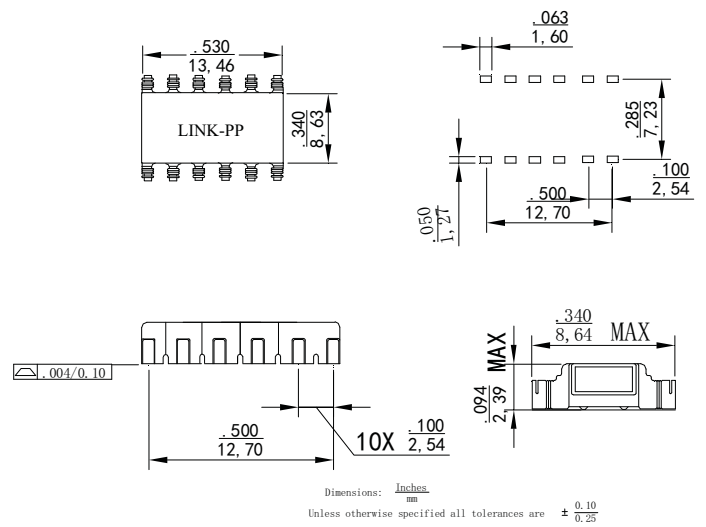
### SMT1



### SMT2

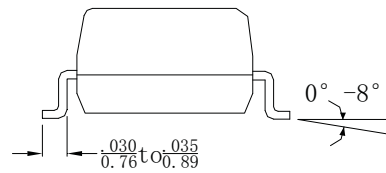
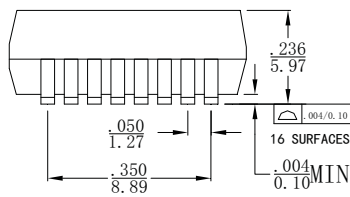
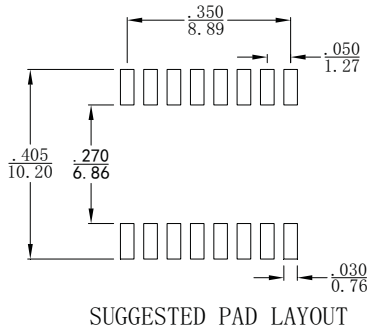
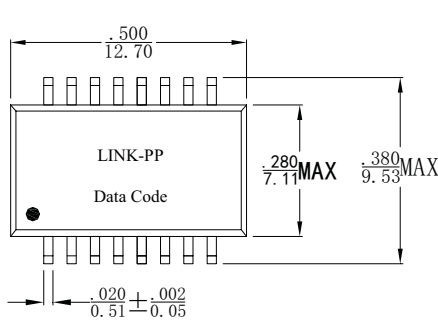


### SMT3



## Surface Mount Mechanicals (continued)

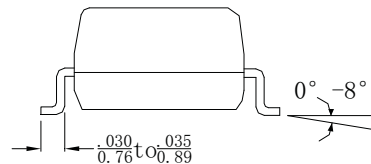
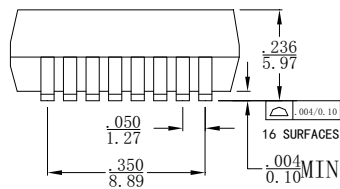
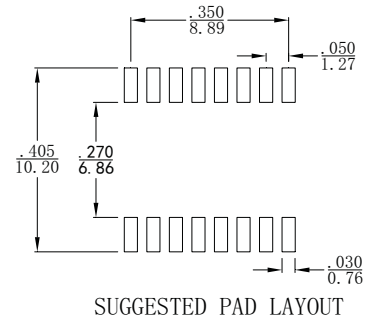
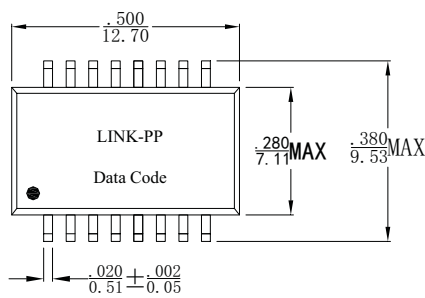
### SMT4



Dimensions:  $\frac{\text{Inches}}{\text{mm}}$

Unless otherwise specified,  
all tolerances are  $\pm \frac{.010}{.25}$

### SMT5

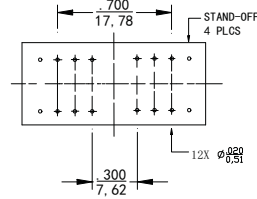
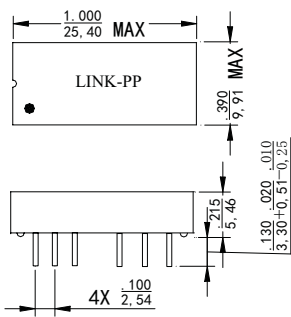


Dimensions:  $\frac{\text{Inches}}{\text{mm}}$

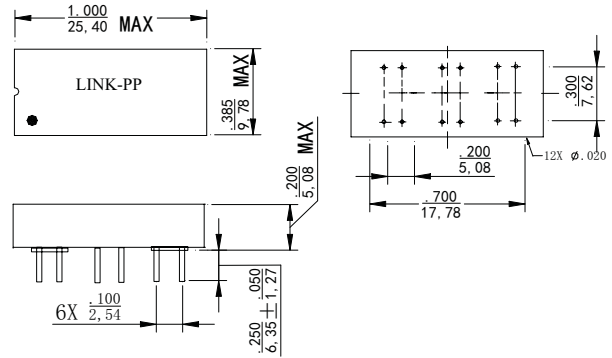
Unless otherwise specified,  
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## Through Hole Mechanicals

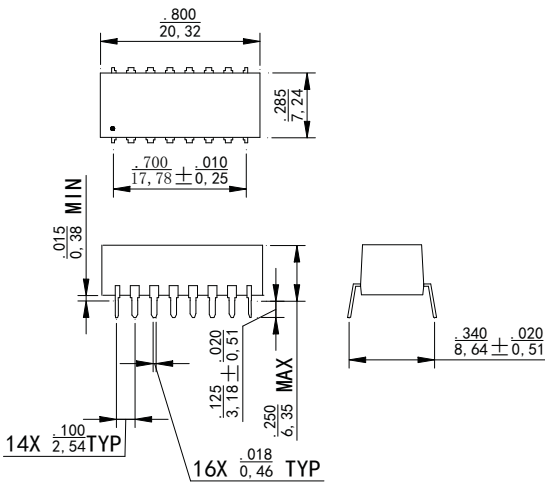
### TH1



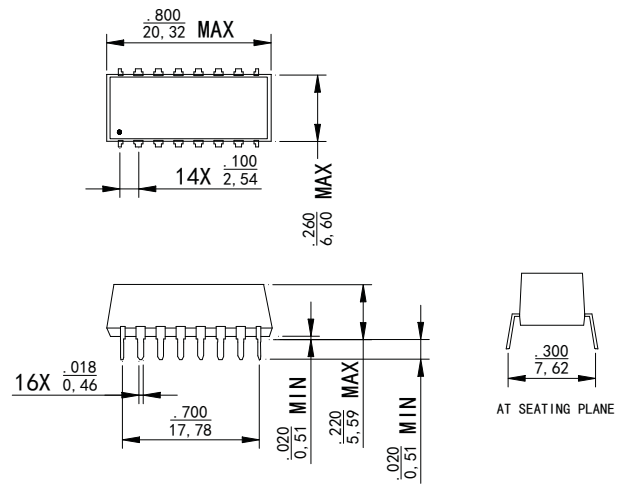
### TH2



### TH3



### TH4



### TH 5

