

10Base-T Isolation Transformers



RoHS Compliant

PART NUMBERING SYSTEM

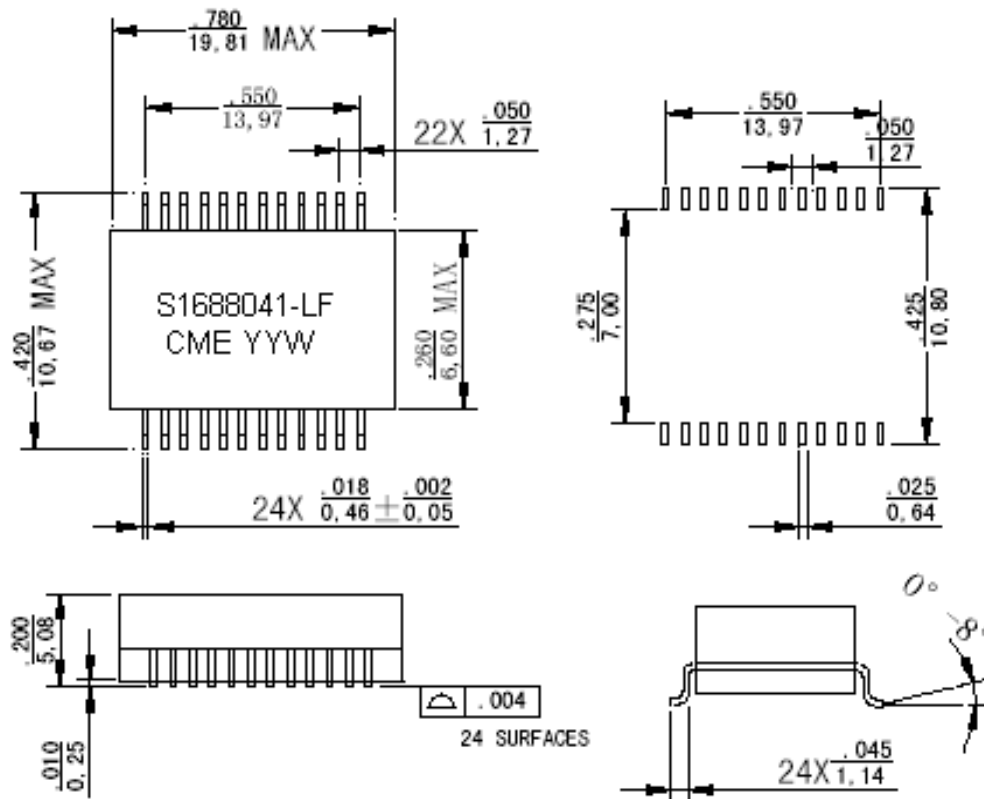
S16 — **114SM** — **LF**
 TYPE DIMENSIONS LEAD FREE

FEATURES

- For Adaptor Cards , Maus , Hubs , and Motherboard applications
- Mdesigned to meet or exceed IEEE802.3 10Base-T specifications
- Available with Common Mode Chokes for EMI Suppression
- SMT, THT, DIP etc package
- RoHS compliant
- **RoHS compliant peak solder rating 235°C**

SHAPES AND DIMENSIONS

Surface Mount Mechanicals ~ SMT1



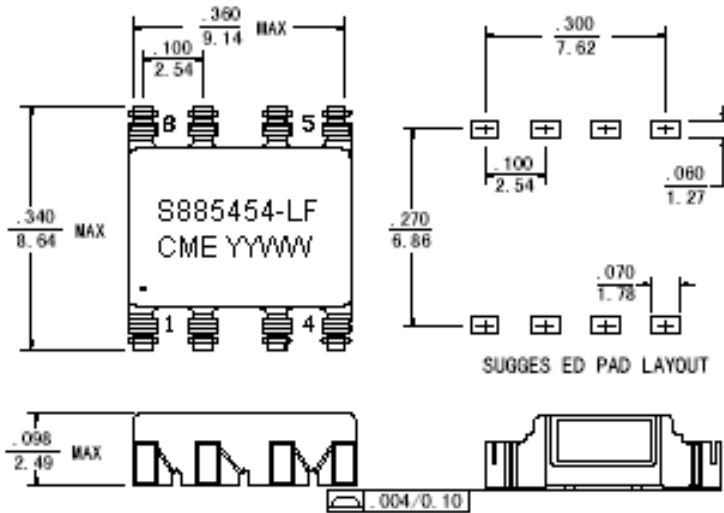
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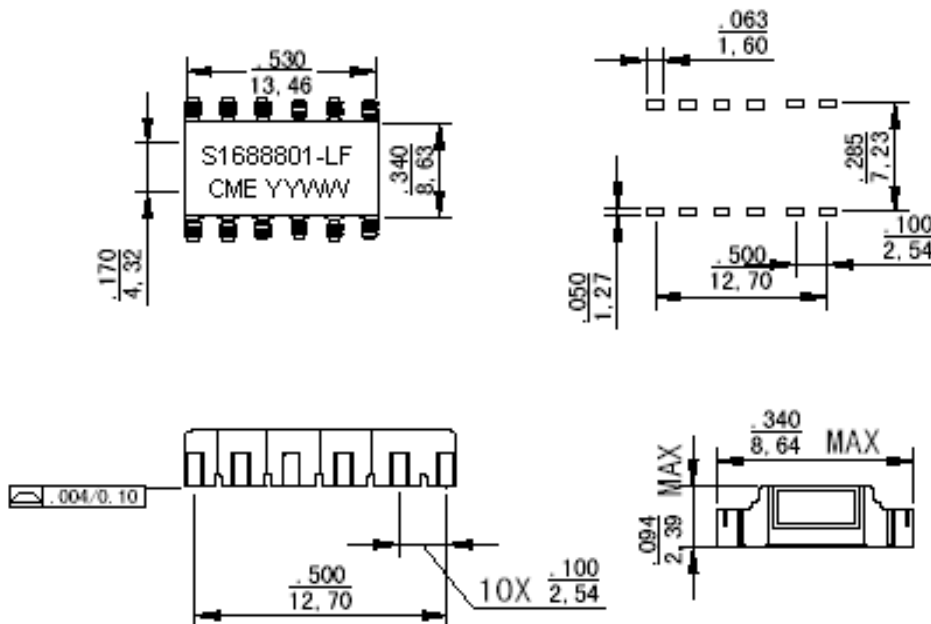
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SHAPES AND DIMENSIONS

Surface Mount Mechanicals ~ SMT2



Surface Mount Mechanicals ~ SMT3



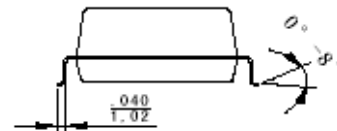
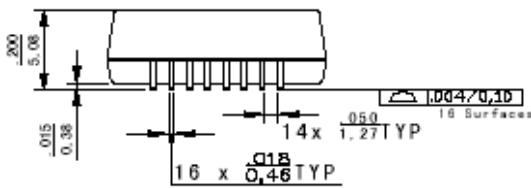
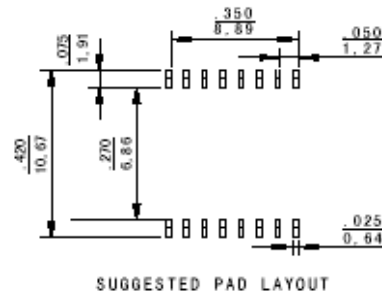
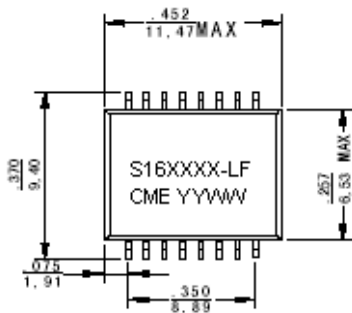
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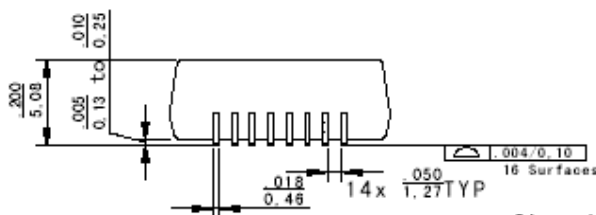
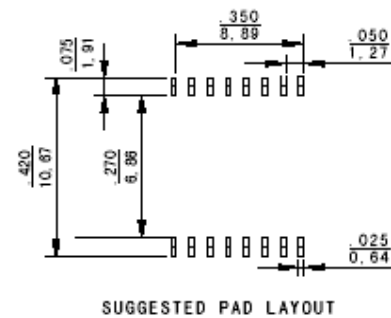
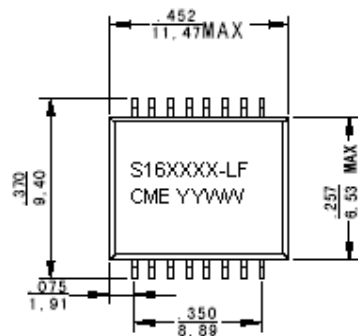
SHAPES AND DIMENSIONS

Surface Mount Mechanicals ~ SMT4



Dimensions: $\frac{\text{Inches}}{\text{mm}}$
Unless otherwise specified,
all tolerances are $\pm \frac{.010}{0.25}$

Surface Mount Mechanicals ~ SMT5



Dimensions: $\frac{\text{Inches}}{\text{mm}}$
Unless otherwise specified,
all tolerances are $\pm \frac{.010}{0.25}$

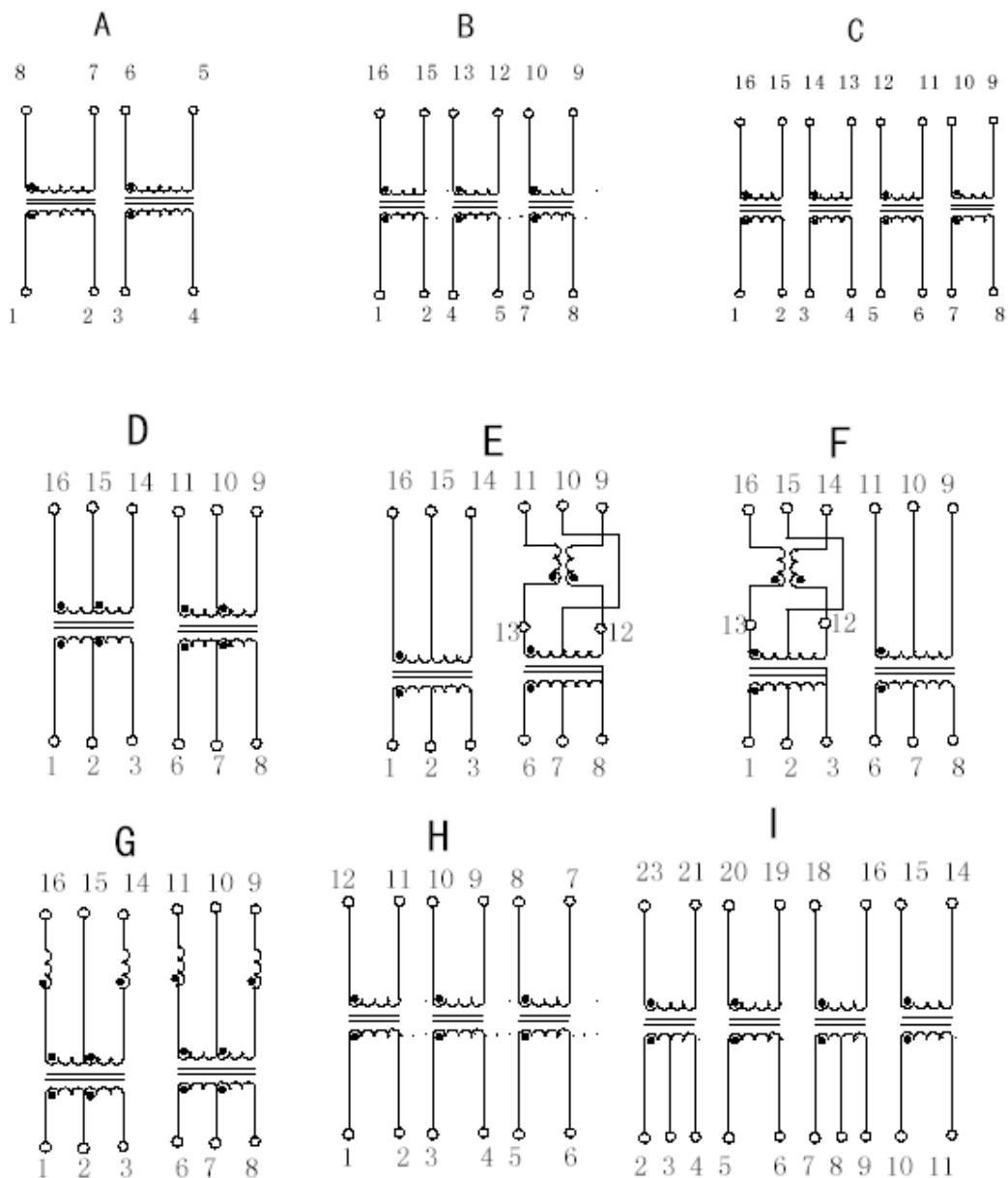
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Schematics

Surface Mount : A, B, C, D, E, F, I



10Base-T Isolation Transformers



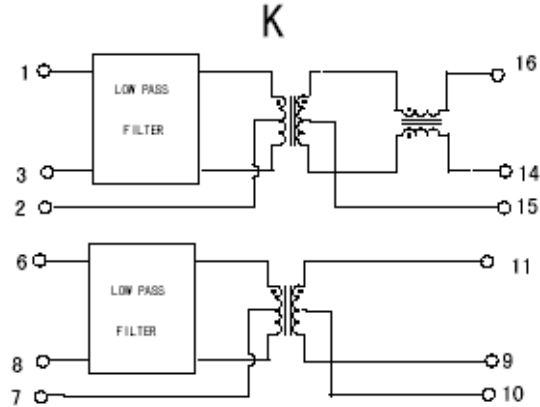
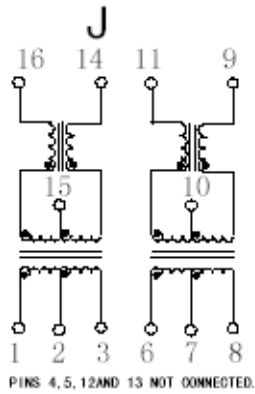
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Schematics

Surface Mount : J, K



10Base-T Isolation Transformers

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

PART NUMBER	Turns Ratio		Primary Pins	Common Mode Chokes	Sine Wave Inductance OCL (uH Min)	Interwinding Capacitance C _{ww} (pF Max)	Leakage Inductance L _L (uH Max)	DCR (ohm Max)	Schem.	Mech.
	TX	RX								
Surface Mount										
S16-114SM-LF	1CT:1CT	1CT:1CT	1-3/6-8		200	12	0.3	0.3	D	SMT5
S16-128SM-LF	1CT:1.414CT	1CT:1CT	6-8/1-3		200	15	0.5	0.4	D	SMT5
S16-356SM-LF	1CT:1.414CT	1CT:1CT	6-8/1-3	X	200	12	0.5	0.6	G	SMT5
S16-435SM-LF	2CT:1CT	1CT:1CT	1-3/6-8		100	10	0.4	0.5	D	SMT5
S16-467SM-LF	1CT:2CT	1CT:1CT	6-8/1-3	X	140	12	0.2	0.6	G	SMT5
S16-2023-LF	1CT:2.5CT	1CT:1CT	6-8/1-3	X	200	15	0.5	0.4	J	SMT4
S16-4001-LF	1CT:2CT	1CT:1CT	6-8/1-3	X	112	8	0.3	0.8	E	SMT4
S16-4005-LF	1CT:2.5CT	1CT:1CT	6-8/1-3	X	200	10	0.4	0.5	J	SMT4
S16-5017-LF	1CT:1CT	1CT:1CT	1-3/6-8	X	200	10	0.25	1.0	F	SMT4
S16-2024-LF	1CT:2.5CT	1CT:1CT	6-8/1-3	X	350	30	0.8	0.6	J	SMT4
S8-85454-LF	1:1.414	1:1	3-4/1-2		140	12	0.2	0.4	A	SMT2
S16-85726-LF	1CT:1CT	1CT:1CT	1-3/6-8		200	10	0.2	0.3	D	SMT4
S16-85745-LF	1CT:1.414CT	1CT:1CT	6-8/1-3		140	12	0.2	0.3	D	SMT4
S8-88023-LF	1CT:2CT	1CT:1CT	1-3/6-8	X	200	12	0.3	1.0	F	SMT4
S16-88041-LF	1CT:2CT	1CT:1CT	6-8/1-3		112	8	0.3	0.5	D	SMT1
S24-88042-LF	2.828CT:1	1:1	2-4/7-9		200	14	1.0	0.5	I	SMT4
S16-88048-LF	1CT:1.414CT	1CT:1CT	6-8/1-3	X	110	15	0.4	1.0	E	SMT4
S16-88052-LF	2CT:1CT	1CT:1CT	1-3/6-8	X	140	12	0.3	1.0	F	SMT4
S16-88810-LF	-	1:1(4x)	1-2/3-4		140	12	0.2	0.4	C	SMT4
S16-88820-LF	1:1.414(4x)	-	1-2/3-4 5-6/7-8		140	12	0.2	0.4	C	SMT4

- 1) OCL , C_{ww} and L_L are measured at 20mVrms , 100KHz.
- 2) Extended temperature parts -40°C to +85°C , Electrical specifications at 25°C

Isolation Transformers For Ethernet

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

PART NUMBER	Turns Ratio ±2%	Primary Pins	Primary Wave OCL (uH±20%)	Primary ET-Constant (V-us Min)	Rise Time (ns Max)	Interwinding Capacitance C _{ww} (pF Max)	Leakage Inductance L _L (uH Max)	DCR (ohm Max)	Schem.	Mech.	Hipot (Vrms)
Surface Mount											
S16-90SM-LF	1:1	1-2/4-5/7-8	75	2.4	3.0	10	0.2	0.3	B	SMT5	2000
S16-91SM-LF	1:1	1-2/4-5/7-8	100	2.4	3.0	10	0.2	0.4	B	SMT5	2000
S16-108SM-LF	1:1	1-2/4-5/7-8	350	2.5	3.5	16	0.4	0.6	B	SMT5	2000
S16-6002-LF	1:1	1-2/4-5/7-8	40(Min)	2.1	3.0	8	0.3	0.5	B	SMT4	2000
S16-85723-LF	1:1	1-2/4-5/7-8	75	1.8	3.0	8	0.3	0.6	B	SMT4	2000
S16-85727-LF	1:1	1-2/4-5/7-8	150	1.2	3.0	12	0.3	0.4	B	SMT4	2000
S16-85728-LF	1:1	1-2/4-5/7-8	100	1.8	3.0	9	0.3	0.8	B	SMT4	2000
S16-88801-LF	1:1	1-2/4-5/7-8	75	1.8	3.0	12	0.3	0.5	H	SMT3	2000

- 1) OCL , C_{ww} and L_L are measured at 20mVrms , 100KHz
- 2) Extended temperature parts -40°C to +85°C , Electric
- 3) Rise time is measured in 75 ohm systems