

# SMT COMMON MODE CHOKES

## SLIC Series

Ruggedized



iNRCORE FAMILY OF BRANDS

- ⊗ Dielectric Strength: 1500 VRMS
- ⊗ Designed for DC/DC converters
- ⊗ Operating & Storage Temperature: -55°C to +130°C
- ⊗ Lead Finish: Sn63/Pb37
- ⊗ Moisture Sensitivity Level: 1

### Electrical Specifications @ 25°C

Part Number	Inductance 10KHz, 30mV (1-2) ( $\mu\text{H} \pm 35\%$ )	Irated (A)	DCR (1-2) & (3-4) (m $\Omega$ MAX)	Package	REFERENCE ONLY			
					Impedance Curve	Weight (grams MAX)	Tube QTY	Reel QTY
PL8200	470	14	8	HCCI-80-1	9	17.5	20	75
PL8201	630	11.6	10	HCCI-80-1	7	17.1	20	75
PL8202	810	9.70	14	HCCI-80-1	9	15.9	20	75
PL8203	534	7.20	15	HCCI-68	8	8.8	20	100
PL8204	590	5.60	21	LCCI-50-1	7	6.0	30	200
PL8205	768	4.70	40	LCCI-50-1	6	5.7	30	200
PL8206	225	3.30	60	LCCI-50-1	5	5.6	30	200
PL8207	1320	3.30	60	LCCI-50-1	4	5.3	30	200
PL8208	1470	2.80	80	LCCI-50-1	3	5.3	30	200
PL8209	880	1.63	110	Polecat	2	2.0	40	500
PL8210	1170	1.22	200	Polecat	1	2.0	40	500
PL8211	10040	1.40	210	LCCI-50-1	10	5.4	30	200
PL8212	1125	1.80	55	Polecat	11	2.2	40	500
PL8213	800	3.00	30	Polecat	12	3.0	40	300
PL8214	382.5	3.30	18	Polecat	13	2.2	40	200
PL8215	536	3.80	17.1	LCCI-37	14	3.0	30	200
PL8216	280	4.00	13.2	Polecat	15	2.0	40	500
PL8217	486	4.20	16	LCCI-44LP-1	16	3.8	35	300
PL8218	130	5.00	6.75	Polecat	17	2.0	40	500
PL8219	96	6.00	4.30	Polecat	18	2.2	40	500
PL8220	400	6.00	9.40	LCCI-44LP-2	19	4.3	35	200
PL8221	61	7.00	2.90	Polecat	20	2.2	40	500
PL8222	484	8.00	7.70	LCCI-50-2	21	6.4	30	200
PL8223	1030	9.00	9.75	HCCI-80-2	22	17.3	20	75
PL8224	215	10	3.75	Makeni-1	23	7.5	25	150
PL8225	95	12.5	3.00	LCCI-50-2	24	5.0	30	200
PL8226	117	14	1.95	Makeni-2	25	7.5	25	150
PL8227	500	16	4.25	HCCI-80-1	26	19.8	20	75
PL8228	380	20	4.10	HCCI-80-1	27	17.3	20	75

#### NOTES:

1. Add suffix "NL" for RoHS compliant version; i.e. PL8200 becomes PL8200NL.
2. For Tape & Reel packaging, add "T" suffix at the end of the part number: i.e. PL8200T.
3. The current rating (Irated) is based upon the temperature rise of the component and represents the rms current, which will cause a typical temperature rise of 55°C with 50LFM forced cooling.
4. The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.

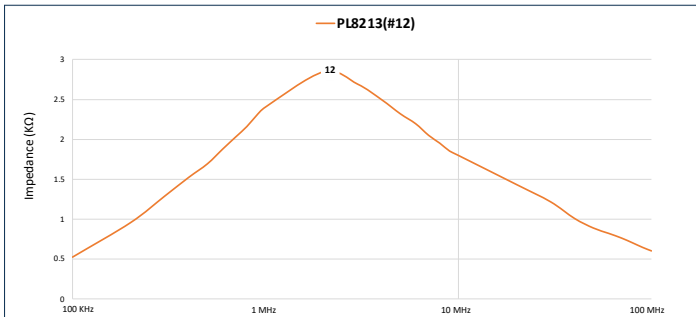
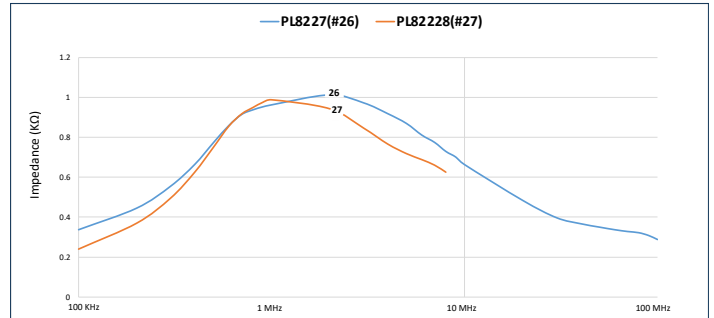
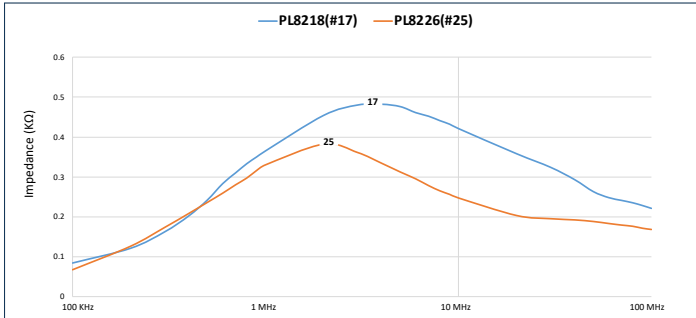
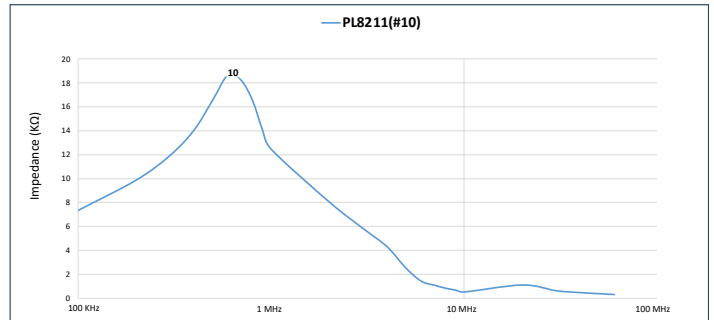
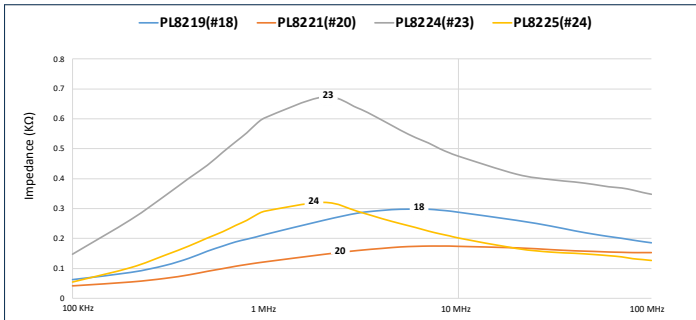
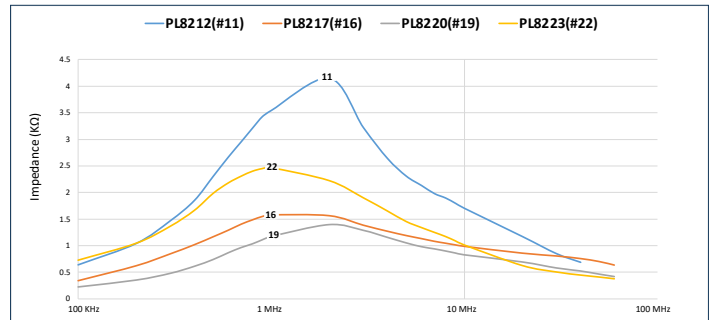
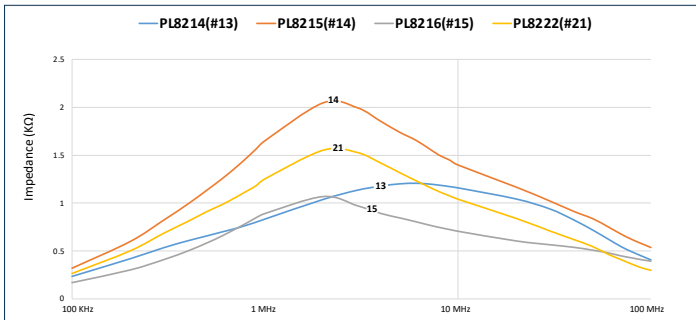
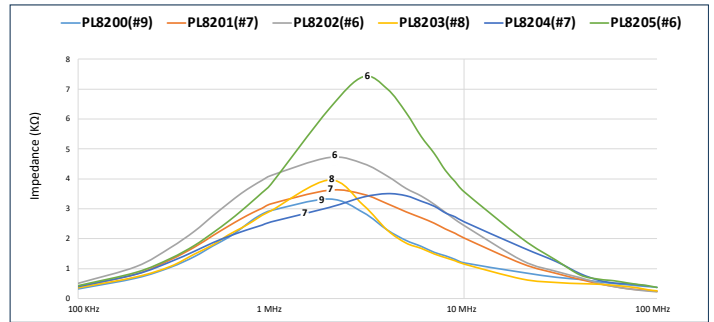
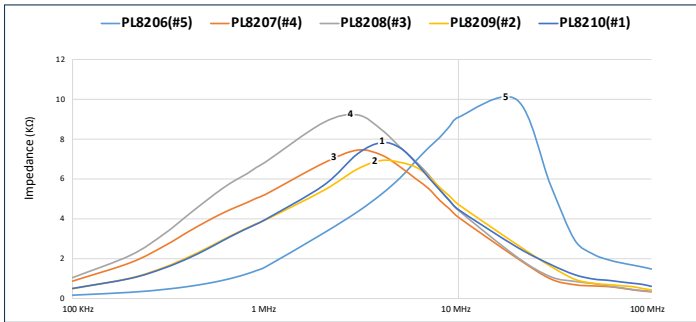


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M108.P (20APR23)

### Impedance Curves

(REFERENCE ONLY)



# SMT COMMON MODE CHOKES

## SLIC Series

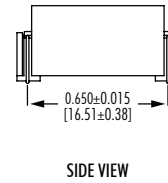
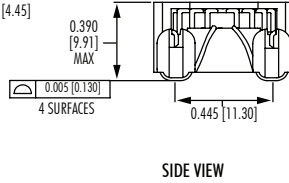
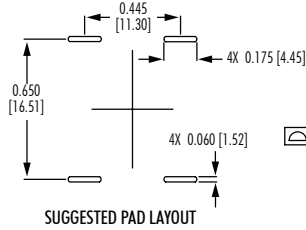
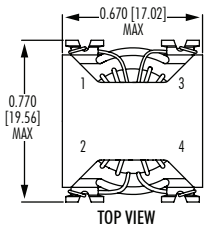
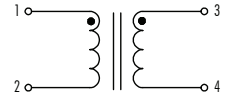
Ruggedized

### Mechanicals

### Electrical Schematic

LCCI-50-1: PL8204/05/06/07/08/11

Dimensions: inch [mm]  
Tolerance (unless otherwise specified):  $\pm 0.010$  [0.25]

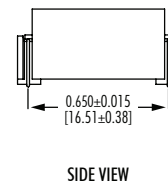
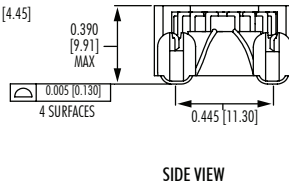
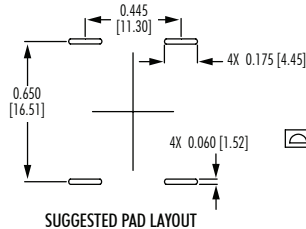
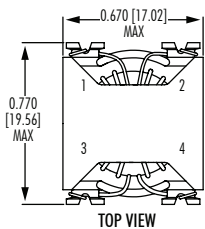
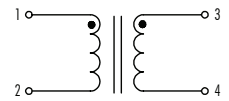


### Mechanicals

### Electrical Schematic

LCCI-50-2: PL8222, PL8225

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Tolerance (unless otherwise specified):  $\pm 0.010$  [0.25]

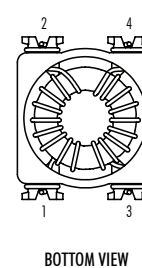
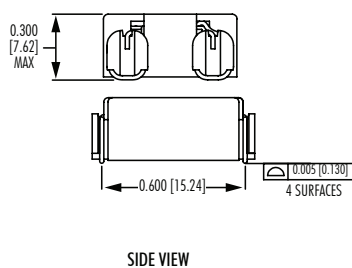
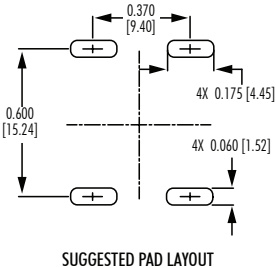
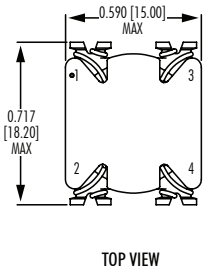
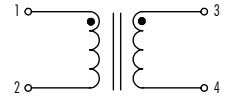


### Mechanicals

### Electrical Schematic

LCCI-44LP-1: PL8217

Dimensions: inch [mm]  
Tolerance (unless otherwise specified):  $\pm 0.010$  [0.25]

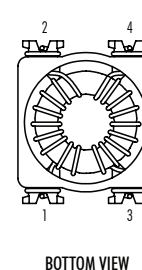
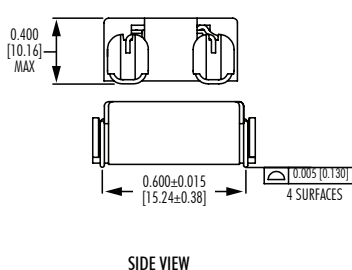
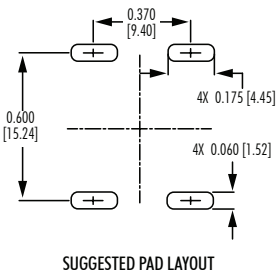
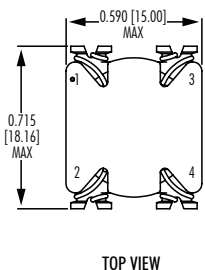
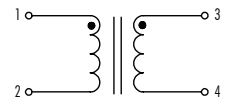


### Mechanicals

### Electrical Schematic

LCCI-44LP-2: PL8220

Dimensions: inch [mm]  
Tolerance (unless otherwise specified):  $\pm 0.010$  [0.25]



# SMT COMMON MODE CHOKES

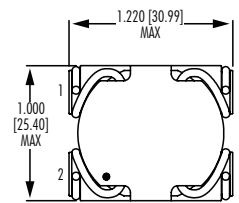
## SLIC Series

Ruggedized

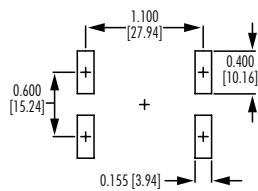
### Mechanicals

### Electrical Schematic

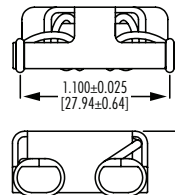
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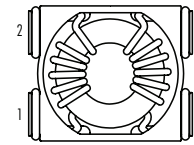
TOP VIEW



SUGGESTED PAD LAYOUT

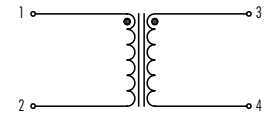


SIDE VIEW



BOTTOM VIEW

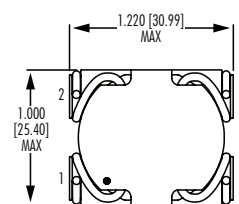
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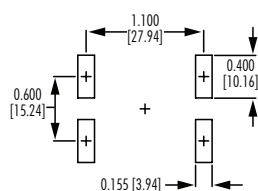
### Mechanicals

### Electrical Schematic

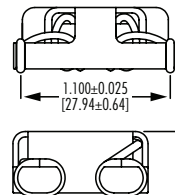
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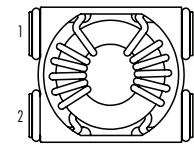
TOP VIEW



SUGGESTED PAD LAYOUT

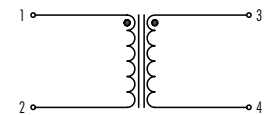


SIDE VIEW



BOTTOM VIEW

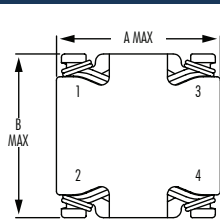
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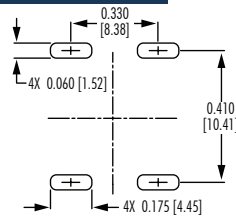
### Mechanicals

#### POLECAT

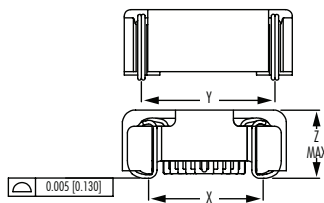
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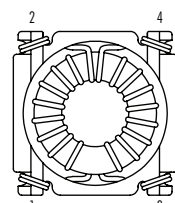
TOP VIEW



SUGGESTED PAD LAYOUT

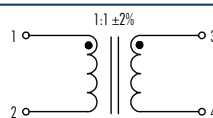


SIDE VIEW



BOTTOM VIEW

### Electrical Schematic



### POLECAT DIMENSIONS

Part Number	A	B	X	Y	Z
PL8209	13.0	13.0	8.4	10.4	5.5
PL8210	13.0	13.0	8.4	10.4	5.5
PL8212	12.7	13.2	8.4	10.4	5.6
PL8213	13.0	13.0	8.4	10.4	8.6
PL8214	13.0	13.0	8.4	10.4	5.6
PL8216	13.0	13.0	8.4	10.4	5.6
PL8218	13.2	13.2	8.6	10.7	5.6
PL8219	13.2	13.2	8.6	10.7	5.6
PL8221	13.5	13.5	8.6	10.7	5.6



# SMT COMMON MODE CHOKES

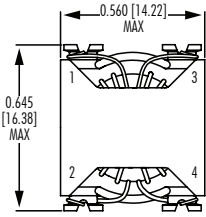
## SLIC Series

Ruggedized

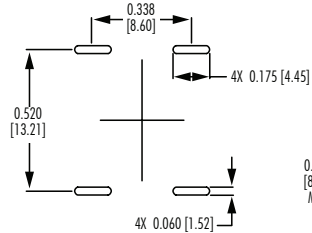
### LCCI-37: PL8215

#### Mechanicals

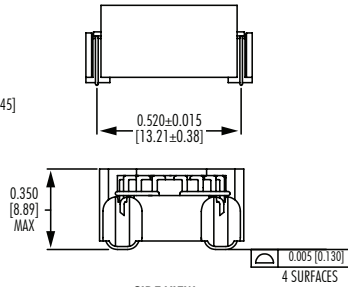
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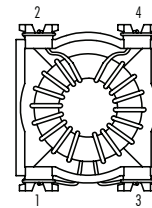
TOP VIEW



SUGGESTED PAD LAYOUT

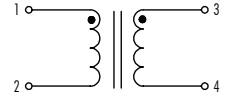


SIDE VIEW



BOTTOM VIEW

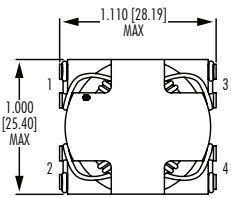
#### Electrical Schematic



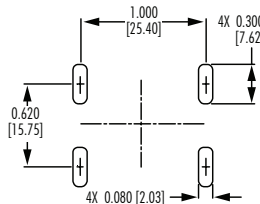
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#### Mechanicals

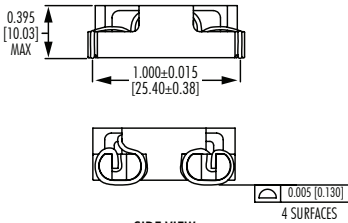
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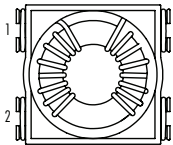
TOP VIEW



SUGGESTED PAD LAYOUT

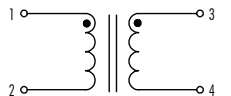


SIDE VIEW



BOTTOM VIEW

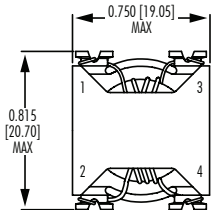
#### Electrical Schematic



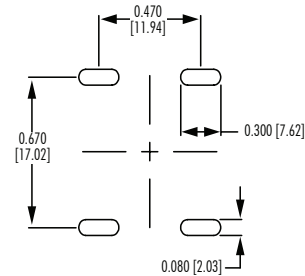
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#### Mechanicals

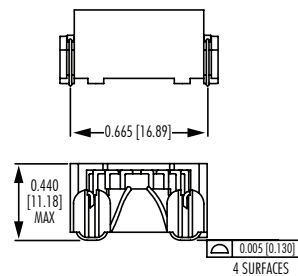
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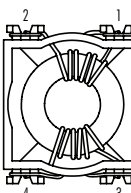
TOP VIEW



SUGGESTED PAD LAYOUT

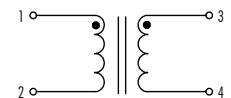


SIDE VIEW



BOTTOM VIEW

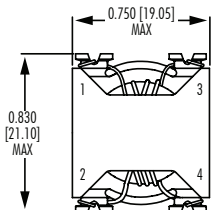
#### Electrical Schematic



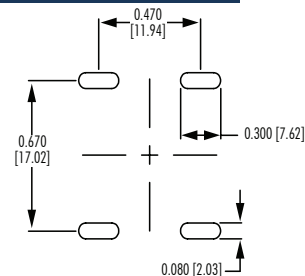
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#### Mechanicals

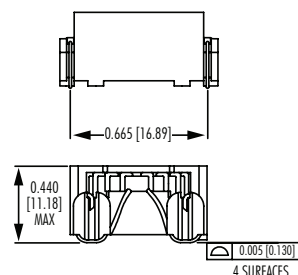
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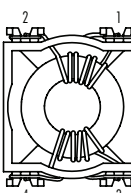
TOP VIEW



SUGGESTED PAD LAYOUT

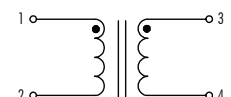


SIDE VIEW



BOTTOM VIEW

#### Electrical Schematic

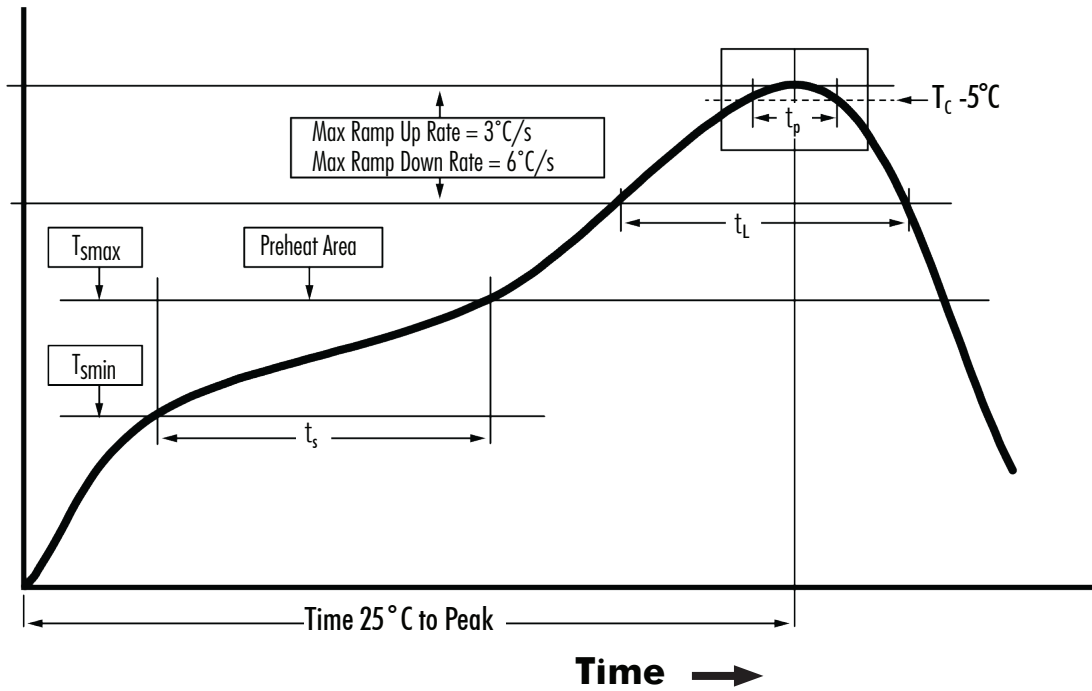


# SMT COMMON MODE CHOKES

SLIC Series

Ruggedized

## Recommended Reflow Profile (Based on J-STD-020D)



$T_{smin}$ (°C)	$T_{smax}$ (°C)	$T_L$ (°C)	$T_P$ (°C MAX)	$t_s$ (s)	$t_L$ (s)	$t_p$ (s MAX)	Ramp-up rate ( $T_L$ to $T_P$ )	Ramp-down rate ( $T_P$ to $T_L$ )	Time 25°C to peak temperature (s MAX)
<b>Tin/Lead Profile</b>									
100	150	183	220	60 - 120	60 - 150	20	3°C/s MAX	6°C/s MAX	360
<b>Non-Lead Profile</b>									
150	200	217	245	60 - 120	60 - 150	30	3°C/s MAX	6°C/s MAX	480

### NOTES:

1. All temperatures measured on the package leads.
2. Maximum number of reflow cycles not to exceed 2.



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