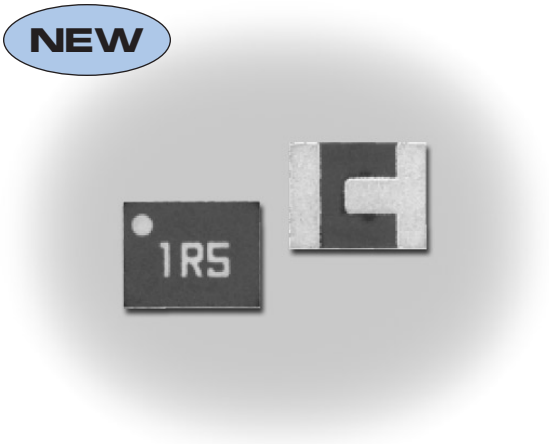
KOA SPEER ELECTRONICS, INC.

PL

planar inductors

RoHS COMPLIANT

NEW

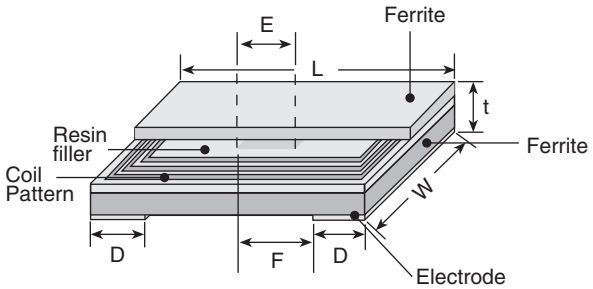


features

- Extremely low-profile power choke coil which height is 0.5 ± 0.1mm in 3.2 x 2.5mm size. High current type with maximum allowable current 800mA
- Eddy current loss is suppressed by a proprietary structural design
- Marking: Black body color with marking
- Products with lead-free terminations meet RoHS requirements

inductors

dimensions and construction



Size (Inch Size Code)	Dimensions inches (mm)					
	L	W	t	D	E	F
PL3225 (1210)	.126±.008 (3.2±0.2)	.098±.008 (2.5±0.2)	.020±.004 (0.5±0.1)	.024±.008 (0.6±0.2)	.031±.008 (0.8±0.2)	.047±.008 (1.2±0.2)

ordering information

New Part #

PL	3225	T	TE	1R1	M
Type	Size	Termination Material	Packaging	Nominal Inductance	Tolerance
	3.2 x 2.5mm	T: Sn	TE: 4mm embossed pitch plastic	3 digits (Unit: µH)	M: ±20%

applications and ratings

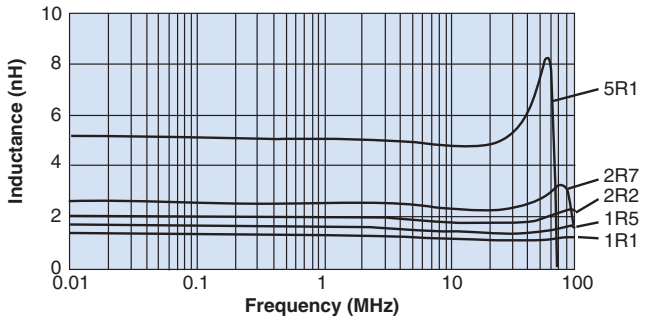
Part Designation	Marking	Inductance (µH)	Inductance Tolerance	DC Resistance Maximum (Ω)	Allowable DC Current Maximum (Amps)	Self Resonant Frequency Minimum (MHz)	Measured Frequency (Hz)	Operating Temperature Range
PL3225TTE1R1M	1R1	1.1	M: ±20%	0.11	800	130	1 MHz	-40°C to +125°C
PL3225TTE1R5M	1R5	1.5		0.15	600	120		
PL3225TTE2R2M	2R2	2.2		0.23	500	90		
PL3225TTE2R7M	2R7	2.7		0.28	400	70		
PL3225TTE5R1M	5R1	5.1		0.60	300	50		

For further information on packaging, please refer to Appendix A.

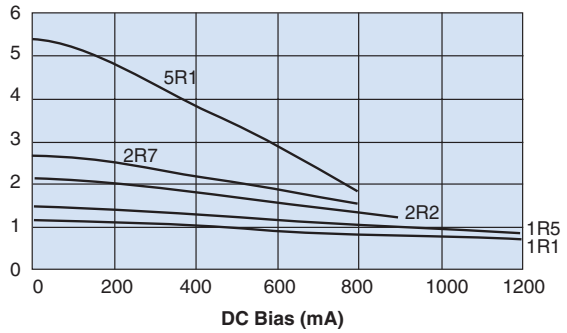
Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order and/or use. 2/28/06

environmental applications

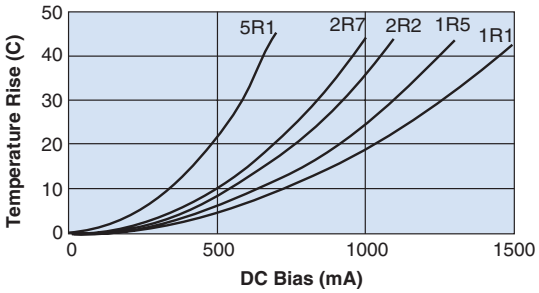
L - Frequency Characteristics



DC Bias Characteristics



Surface Temperature Rise



Performance Characteristics

Parameter	Requirements Maximum Δ L Limit	Typical	Test Method
Resistance to Soldering Heat	Without distinct damage in appearance and construction Δ L/L: ±10%	Δ L/L: ±2.5%	260°C ± 5°C, 10s ± 1s
Rapid Change of Temperature	Without distinct damage in appearance and construction Δ L/L: ±10%	Δ L/L: ±1.5%	-40°C (30min.)/ +125°C (30min.) 100 cycles
Low Temperature Exposure	Without distinct damage in appearance and construction Δ L/L: ±10%	Δ L/L: ±1.0%	-40°C ± 3°C, 1000h
High Temperature Exposure	Without distinct damage in appearance and construction Δ L/L: ±10%	Δ L/L: ±1.5%	125°C ± 2°C, 1000h
Moisture Exposure	Without distinct damage in appearance and construction Δ L/L: ±10%	Δ L/L: ±1.5%	40°C ± 2°C, 90%~95%RH, 1000h
Resistance to Solvent	Without distinct damage in appearance and construction Δ L/L: ±10%	Δ L/L: ±0.5%	Accordance with MIL-STD 202G Method 215

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