KOA SPEER ELECTRONICS, INC.

KL32

1210 molded wirewound inductor

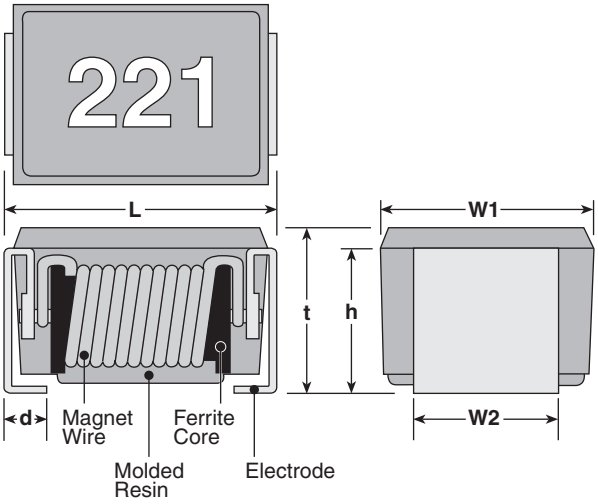
EU RoHS COMPLIANT

features

- UL94V0 molded epoxy case
- Suitable for reflow and wave soldering
- 1210 size - surface mount style
- High Q value achieved by wirewound structure
- Marking: Black body color with white marking
- Products with lead-free terminations meet EU RoHS requirements

inductors

dimensions and construction



Type	Dimensions inches (mm)					
	L	W1	W2	t	h	d
KL32	.126±.008 (3.2±0.2)	.098±.008 (2.5±0.2)	.067±.004 (1.7±0.1)	.087±.008 (2.2±0.2)	.075±.004 (1.9±0.1)	.02 nominal (.5 nominal)

Inductance Marking

Value	Code
0.005µH - 0.082µH	005 - 082
0.10µH - 8.2µH	R10 - 8R2 R indicates decimal point.
10µH - 330µH	100 - 331 1st two figures are significant, the last figure indicates the number of zeros to follow.

ordering information

New Part # KL | 32 | T | TE | 101 | J

Type	Size	Termination Material	Packaging	Nominal Inductance	Tolerance
	1210 size	T: Sn	TE: 7" embossed plastic TED: 10" embossed plastic (TE: 2,000 pieces/reel) (TED: 4,000 pieces/reel	Reference inductance marking chart	J: ±5% K: ±10% M: ±20%

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.

2/24/08

applications and ratings

Part Designation	Inductance (µH)	Inductance Tolerance	Quality Factor Minimum	Self Resonant Frequency Minimum (MHz)	DC Resistance Maximum (Ω)	Allowable DC Current Maximum (mA)	Measured Frequency (MHz)
KL32TTE005*	0.005	M: ±20%	11	2700	0.12	450	100
KL32TTE010*	0.010	K: ±10% M: ±20%	15	2500	0.13		
KL32TTE012*	0.012		17	2300	0.14		
KL32TTE015*	0.015		19	2100	0.16		
KL32TTE018*	0.018		21	1900	0.18		
KL32TTE022*	0.022		23	1700	0.20		
KL32TTE027*	0.027			1500	0.22		
KL32TTE033*	0.033	J: ±5% K: ±10% M: ±20%	25	1400	0.24		
KL32TTE039*	0.039			1300	0.27		
KL32TTE047*	0.047		26	1200	0.30		
KL32TTE056*	0.056			1100	0.33		
KL32TTE068*	0.068		27	1000	0.36		
KL32TTE082*	0.082			900	0.40		
KL32TTER10*	0.10		28	700	0.44		
KL32TTER12*	0.12		30	500	0.22		25.2
KL32TTER15*	0.15			450	0.25		
KL32TTER18*	0.18			400	0.28		
KL32TTER22*	0.22			350	0.32		
KL32TTER27*	0.27			320	0.36		
KL32TTER33*	0.33			300	0.40		
KL32TTER39*	0.39			250	0.45		
KL32TTER47*	0.47			220	0.50		
KL32TTER56*	0.56			180	0.55		
KL32TTER68*	0.68			160	0.60		
KL32TTER82*	0.82			140	0.65		
KL32TTE1R0*	1.0	J: ±5% K: ±10% M: ±20%		120	0.70	400	7.96
KL32TTE1R2*	1.2			100	0.75	390	
KL32TTE1R5*	1.5			85	0.85	370	
KL32TTE1R8*	1.8			80	0.90	350	
KL32TTE2R2*	2.2			75	1.0	320	
KL32TTE2R7*	2.7			70	1.1	290	
KL32TTE3R3*	3.3			60	1.2	260	
KL32TTE3R9*	3.9			55	1.3	250	
KL32TTE4R7*	4.7			50	1.5	220	
KL32TTE5R6*	5.6			47	1.6	200	
KL32TTE6R8*	6.8			43	1.8	180	
KL32TTE8R2*	8.2			40	2.0	170	
KL32TTE100*	10			36	2.1	150	2.52
KL32TTE120*	12			33	2.5	140	
KL32TTE150*	15			30	2.8	130	
KL32TTE180*	18			27	3.3	120	
KL32TTE220*	22			25	3.7	110	
KL32TTE270*	27			20	5.0	80	
KL32TTE330*	33			17	5.6	70	
KL32TTE390*	39			16	6.4	65	
KL32TTE470*	47			15	7.0	60	
KL32TTE560*	56			13	8.0	55	
KL32TTE680*	68			12	9.0	50	
KL32TTE820*	82			11	10	45	
KL32TTE101*	100		20	10		40	0.796
KL32TTE121*	120				11	70	
KL32TTE151*	150			8	15	65	
KL32TTE181*	180			7	17	60	
KL32TTE221*	220				21	50	
KL32TTE271*	270			6	28		
KL32TTE331*	330			5	34		

* Add tolerance character (J, K, M)

For complete environmental specifications, please refer to page 212.

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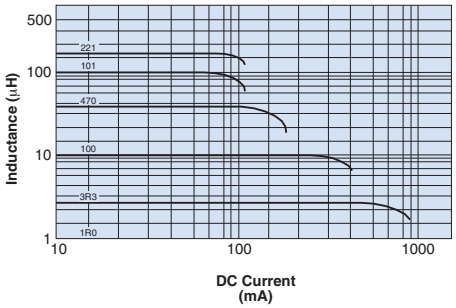
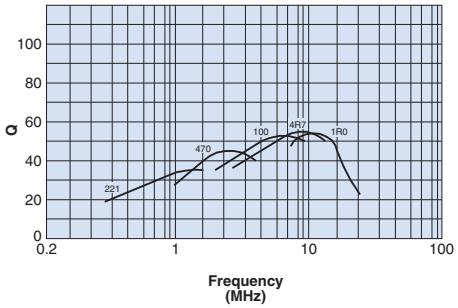
environmental applications

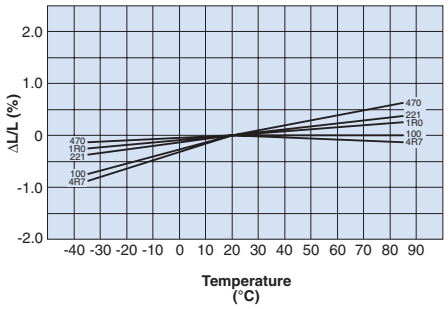
DC Current Characteristics



Q-Frequency Characteristics



Temperature Characteristics



Performance Characteristics

Parameter	Requirements Maximum Limit	Δ L/L Typical	Test Method
Resistance to Soldering Heat	Δ L/L: ±3%	Δ L/L: ±1.5%	260°C ± 5°C, 10s ± 1s
Heat Shock	Δ L/L: ±5%	Δ L/L: ±1.1%	-25°C (1 hour)/ +100°C (1 hour) 100 cycles
Low Temperature Operation	Δ L/L: ±5%, Δ Q/Q: ±20%	Δ L/L: ±0.9% Δ Q/Q: ±5.0%	-40°C ± 2°C, 1000h
High Temperature Exposure	Δ L/L: ±5%, Δ Q/Q: ±30%	Δ L/L: ±0.8% Δ Q/Q: ±5.0%	100°C ± 2°C, 1000h
Moisture Exposure	Δ L/L: ±5%, Δ Q/Q: ±30%	Δ L/L: ±1.3% Δ Q/Q: ±5.2%	40°C ± 2°C, 90%~95%RH, 1000h
Resistance to Solvent	No damage and marking shall be legible	—	Accordance with MIL-STD-202F Method 215

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