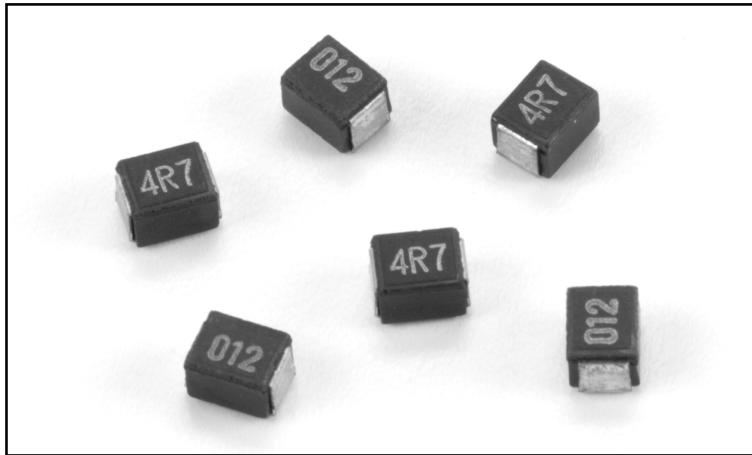
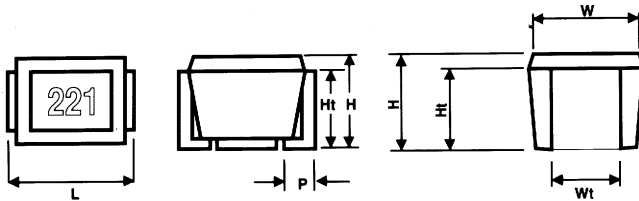


CHIP INDUCTORS

- UL94V-0 Molded Epoxy Case
- Suitable for Reflow & Wave Solder
- 1210 Size - Surface Mount Style
- E12 Series of Values
- Wound Coil Type
- SMT Lab Kit also available



DIMENSIONS



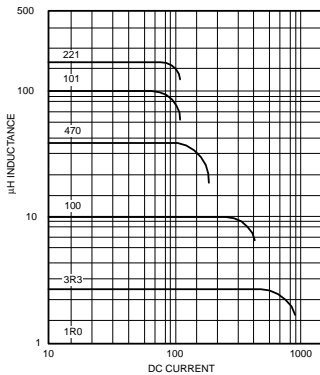
DIMENSIONS	L	W	Wt	H	Ht	P
MM	3.2 ±0.2	2.5 ±0.2	1.7 ±0.1	2.2 ±0.2	1.9 ±0.1	.50 nominal
INCH	.126 ±.008	.098 ±.008	.067 ±.004	.087 ±.008	.075 ±.004	.02 nominal

MARKING ON INDUCTOR CHIP

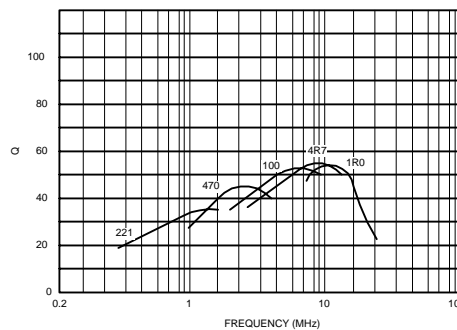
VALUE	CODE
0.005μH to 0.082μH	005 - 082
0.10μH to 8.2μH	R10 - 8R2
10μH - 330 μH	100 - 331

R Indicates Decimal Pt.
1st two figures are significant, the last figure indicates the number of zeros to follow

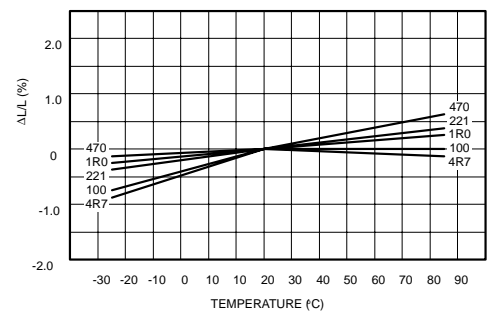
DC CURRENT CHARACTERISTICS



Q-FREQUENCY CHARACTERISTICS



TEMPERATURE CHARACTERISTICS



ORDERING & SPECIFYING INFORMATION*

KL	32	TE	101	J
Type	Size Code	Packaging	Nominal Inductance	Tolerance
	3.2x2.5x2.2 1210 Size	TE: Embossed Plastic 2000 pcs/reel TED: 10" Embossed Plastic	Value designation same as marking on Inductor Chip	J: ±5% K: ±10% M: ±20%

*Please Note: KSE's Part Numbers Do Not Contain any Spaces or Hyphens.

STANDARD APPLICATIONS

TYPE	Ind. μ H	Inductance Tolerance (%)			Quality Factor min.MHz	SRF Res (min) MHz	DC. (max.) Ω	Allowable DC Currant mA max.	Meas. Frequency Mhz		
		M	K	J							
KL32TE005*	0.005	±20			11	2700	0.12	450	100		
KL32TE010*	0.010				15	2500	0.13				
KL32TE012*	0.012				17	2300	0.14				
KL32TE015*	0.015				19	2100	0.16				
KL32TE018*	0.018				21	1900	0.18				
KL32TE022*	0.022				23	1700	0.20				
KL32TE027*	0.027					1500	0.22				
KL32TE033*	0.033				25	1400	0.24				
KL32TE039*	0.039					1300	0.27				
KL32TE047*	0.047				26	1200	0.30				
KL32TE056*	0.056					1100	0.33				
KL32TE068*	0.068				27	1000	0.36				
KL32TE082*	0.082					900	0.40				
KL32TER10*	0.10				28	700	0.44				
KL32TER12*	0.12					500	0.22				
KL32TER15*	0.15				±10	450	0.25			30	7.96
KL32TER18*	0.18					400	0.28				
KL32TER22*	0.22					350	0.32				
KL32TER27*	0.27					320	0.36				
KL32TER33*	0.33					300	0.40				
KL32TER39*	0.39	250	0.45								
KL32TER47*	0.47	220	0.50								
KL32TER56*	0.56	180	0.55								
KL32TER68*	0.68	160	0.60								
KL32TER82*	0.82	140	0.65								
KL32TE1R0*	1.0	±5	120	0.70	400	2.52					
KL32TE1R2*	1.2		100	0.75	390						
KL32TE1R5*	1.5		85	0.85	370						
KL32TE1R8*	1.8		80	0.90	350						
KL32TE2R2*	2.2		75	1.0	320						
KL32TE2R7*	2.7		70	1.1	290						
KL32TE3R3*	3.3		60	1.2	260						
KL32TE3R9*	3.9		55	1.3	250						
KL32TE4R7*	4.7		50	1.5	220						
KL32TE5R6*	5.6		47	1.6	200						
KL32TE6R8*	6.8	43	1.8	180							
KL32TE8R2*	8.2	40	2.0	170							
KL32TE100*	10	±10	36	2.1	150	0.796					
KL32TE120*	12		33	2.5	140						
KL32TE150*	15		30	2.8	130						
KL32TE180*	18		27	3.3	120						
KL32TE220*	22		25	3.7	110						
KL32TE270*	27		20	5.0	80						
KL32TE330*	33		17	5.6	70						
KL32TE390*	39		16	6.4	65						
KL32TE470*	47		15	7.0	60						
KL32TE560*	56		13	8.0	55						
KL32TE680*	68	12	9.0	50							
KL32TE820*	82	11	10	45							
KL32TE101*	100	±20	10	10	40	50					
KL32TE121*	120		10	11	70						
KL32TE151*	150		8	15	65						
KL32TE181*	180		7	17	60						
KL32TE221*	220		7	21							
KL32TE271*	270	6	28								
KL32TE331*	330	5	34								

TE: EMBOSSED PLASTIC *: TOLERANCE CHARACTER (J,K,M)

CHIP
INDUCTORS

ENVIRONMENTAL & MECHANICAL CHARACTERISTICS

PARAMETER	MAXIMUM Δ L	TEST METHODS
Low Temperature Characteristics	No evidence of damage Δ L/L within $\pm 5\%$ Δ Q/Q within $\pm 20\%$	Store at $-40 \pm 2^\circ\text{C}$, for 1000 hours
Resistance to Heat	No evidence of damage Δ L/L within $\pm 5\%$ Δ Q/Q within $\pm 30\%$	Store at $+100 \pm 2^\circ\text{C}$, for 1000 hours
Thermal Shock	No evidence of damage Δ L/L within $\pm 5\%$	100 cycles between $-25^\circ\text{C}/\text{hour}$ and $+100^\circ\text{C}/\text{hour}$
Temperature Characteristics	Δ L/L within $\pm 10\%$	Δ L/L to be measured at the Temperatures between -25°C and $+85^\circ\text{C}$, referenced to the inductance at 25°C
Moisture Endurance	No evidence of damage Δ L/L within $\pm 5\%$ Δ Q/Q within $\pm 30\%$	Temperature $40 \pm 2^\circ\text{C}$, humidity 90 - 95%, 1000 hours
Resistance to Solvents	No damage and markings must remain legible	MIL -STD - 202 Method 215
Terminal Pull Strength	No evidence of damage	Terminals shall withstand a pull of 0.5Kg in a horizontal direction
Terminal Bending Strength	No evidence of breakdown	Specimen shall be soldered and force applied to the opposite side to cause a 3mm deflection
Vibration	Δ L/L shall be within $\pm 3\%$	2 hours in each direction of X, Y, Z on PCB at a frequency range of 10 - 55 - 10HZ with 1.5mm amplitude
Resistance to Soldering Heat	No evidence of outer damage Δ L/L shall be within $\pm 3\%$	Immerse in solder at $260 \pm 5^\circ\text{C}$ for 10 ± 1 seconds
Solderability	95% of the terminal should be covered with new solder	Immerse in solder at $230 \pm 5^\circ\text{C}$ for 3 ± 0.5 seconds
DC Superimposition	Δ L/L within $\pm 10\%$	When the allowable current is applied, inductance to be measured by LCR - meter
Dielectric Withstanding Voltage	No evidence of flaming, fuming, or breakdown	5 seconds at DC 1000V applied between both terminals and case.
Insulation Resistance	1000M ohm and over	1 minute at DC 500V measured between both terminals and case
Storage Temperature Range	$-40^\circ\text{C} \sim +100^\circ\text{C}$	
Operating Temperature Range	$-40^\circ\text{C} \sim +100^\circ\text{C}$	