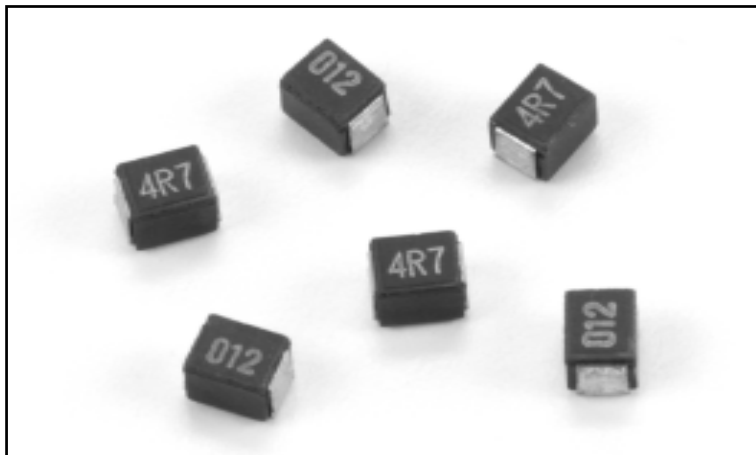
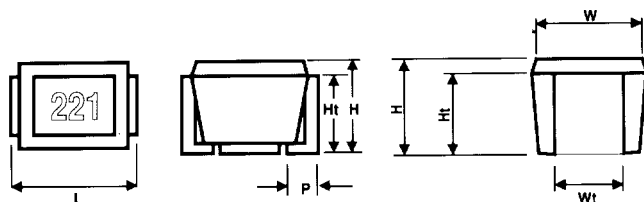




CHIP INDUCTORS

- 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

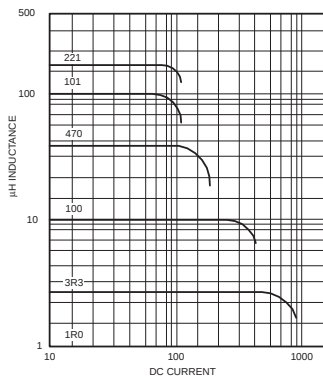


DIMENSIONS	L	W	Wt	H	Ht	P
MM	3.2 ±0.2	2.5 ±0.2	1.7 ±0.1	2.2 ±0.2	1.9 ±0.1	.50 nominal
INCH	.126 ±.008	.098 ±.008	.067 ±.004	.087 ±.008	.075 ±.004	.02 nominal

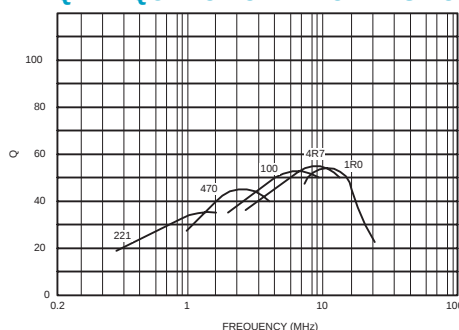
MARKING ON INDUCTOR CHIP

VALUE	CODE
0.005μH to 0.082μH	005 - 082
0.10μH to 8.2μH	R10 - 8R2
	R Indicates Decimal Pt.
10μH - 330 μH	100 - 331
	1st two figures are significant, the last figure indicates the number of zeros to follow

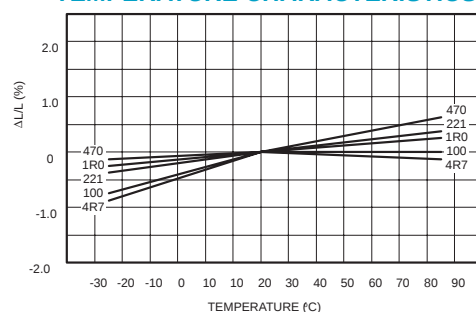
DC CURRENT CHARACTERISTICS



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 TDD: 10" Punched Paper 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. nH	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					30	500		0.22
KL32TER15*	0.15				450		0.25		
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	±10		120	0.70	400	7.96		
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	2.52				
KL32TE100*	10	36	2.1	150					
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	0.796				
KL32TE820*	82	11	10	45					
KL32TE101*	100	±5		10		10	40		
KL32TE121*	120			10		11	70		
KL32TE151*	150			8		15	65		
KL32TE181*	180			7		17	60		
KL32TE221*	220			7		21	50		
KL32TE271*	270			6	28				
KL32TE331*	330			5	34				

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

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	$-40^\circ\text{C} \sim +100^\circ\text{C}$	