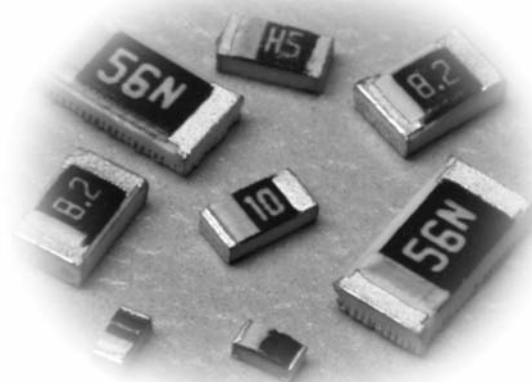
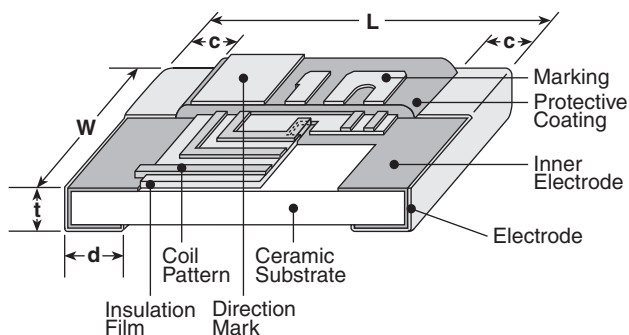




features

- Excellent for high frequency applications
- Low DC resistance and high Q
- Suitable for reflow and wave soldering
- Low tolerance $\pm 2\%$ available
- Small size allows for high density mounting (1E, 1J, 2A, 2B)
- Marking: Yellow marking on blue protective coating (1E, 1J, 2A, 2B)
- Products with lead-free terminations meet EU RoHS and China RoHS requirements

dimensions and construction



Type (Inch Size Code)	Dimensions inches (mm)				
	L	W	c	d	t
1E (0402)	.039 $\pm$.004 (1.0 $\pm$ 0.1)	.02 $\pm$.002 (0.5 $\pm$ 0.05)	.006 $\pm$.004 (0.15 $\pm$ 0.1)	.01 $\pm$.004 (0.25 $\pm$ 0.1)	.014 $\pm$.002 (0.35 $\pm$ 0.05)
1J (0603)	.063 $\pm$.008 (1.6 $\pm$ 0.2)	.031 $\pm$.004 (0.8 $\pm$ 0.1)	.012 $\pm$.004 (0.3 $\pm$ 0.1)	.012 $\pm$.004 (0.3 $\pm$ 0.1)	.02 $\pm$.004 (0.5 $\pm$ 0.1)
2A (0805)	.079 $\pm$.008 (2.0 $\pm$ 0.2)	.049 $\pm$.008 (1.25 $\pm$ 0.2)	.016 $\pm$.008 (0.4 $\pm$ 0.2)	.012 $\pm$.004 (0.3 $\pm$ 0.2)	.02 $\pm$.004 (0.5 $\pm$ 0.1)
2B (1206)	.126 $\pm$.008 (3.2 $\pm$ 0.2)	.063 $\pm$.008 (1.6 $\pm$ 0.2)	.02 $\pm$.008 (0.5 $\pm$ 0.2)	.016 $\pm$.008 (0.4 $\pm$ 0.2)	.024 $\pm$.004 (0.6 $\pm$ 0.1)

Inductance Marking

Part 1J (nH)	Marking
1.0	L1
1.2	L2
1.5	L3
1.8	L4
2.2	22
2.7	27
3.3	33
3.9	39
4.7	47
5.6	56
6.8	68
8.2	82

Part 1J (nH)	Marking
10	10
12	12
15	15
18	H1
22	H2
27	H3
33	H4
39	H5
47	H6
56	H7
68	H8
82	H9

Part Marking	Value (nH) 2.2 - 8.2	Value (nH) 10 and higher
2A	Ex. = 2.2 = 2.2nH	Ex. = 15 = 15nH
2B	Ex. = 2N2 = 2.2nH	Ex. = 15N = 15nH

No marking on 1E (0402)

ordering information

New Part #	KL73	2A	T	TE	4N7	G
	Type	Size Code	Termination Material	Packaging	Nominal Inductance	Tolerance
		1E: 0402 1J: 0603 2A: 0805 2B: 1206	T: Sn	TP: 7" paper 2mm pitch (1E only - 10,000 pieces/reel) TE: 7" embossed plastic 4mm pitch (1J, 2A, 2B - 4,000 pieces/reel)	4N7: 4.7nH 47N: 47nH	B: ± 0.1 nH C: ± 0.2 nH G: $\pm 2\%$ J: $\pm 5\%$

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

applications and ratings

Part Designation	Inductance (nH)	Inductance Tolerance	Quality Factor Minimum	Self Resonant Frequency Minimum (MHz)	DC Resistance Maximum (Ω)	Allowable DC Current Maximum (mA)	Measured Frequency (MHz)			
KL731ETTPN56B	0.56	B: ± 0.1 nH	7	14000	0.10	700	500			
KL731ETTPN68B	0.68									
KL731ETTPN82B	0.82									
KL731ETTP1N0*	1.0	B: ± 0.1 nH C: ± 0.2 nH	10	12000	0.15	650				
KL731ETTP1N2*	1.2			10000	0.20					
KL731ETTP1N5*	1.5									
KL731ETTP1N8*	1.8			8000	0.25	600				
KL731ETTP2N2*	2.2					550				
KL731ETTP2N7*	2.7									
KL731ETTP3N3*	3.3	G: $\pm 2\%$ J: $\pm 5\%$	7	6000	0.30	500				
KL731ETTP3N9*	3.9			5000	0.50	450				
KL731ETTP4N7*	4.7					350				
KL731ETTP5N6*	5.6			4000	1.00	300				
KL731ETTP6N8*	6.8					250				
KL731ETTP8N2*	8.2					200				
KL731ETTP10N*	10			2500	1.50	150				
KL731ETTP12N*	12					100				
KL731ETTP15N*	15					75				
KL731ETTP18N*	18			2000	2.00	50				
KL731ETTP22N*	22					35				
KL731ETTP27N*	27					25				
KL731ETTP33N*	33			1500	3.00	15				
KL731ETTP47N*	47					10				
KL731ETTP68N*	68					7.5				
KL731JTTE1N0*	1.0	C: ± 0.2 nH	10	13000	0.10	650	500			
KL731JTTE1N2*	1.2		15							
KL731JTTE1N5*	1.5		20	10000	0.15	450				
KL731JTTE1N8*	1.8			8000		350				
KL731JTTE2N2*	2.2			0.25						
KL731JTTE2N7*	2.7									
KL731JTTE3N3*	3.3	G: $\pm 2\%$ J: $\pm 5\%$	25	6000	0.50	250				
KL731JTTE3N9*	3.9			5000		200				
KL731JTTE4N7*	4.7									
KL731JTTE5N6*	5.6			4000	1.0	150				
KL731JTTE6N8*	6.8					120				
KL731JTTE8N2*	8.2									
KL731JTTE10N*	10			2500	1.50	100				
KL731JTTE12N*	12					75				
KL731JTTE15N*	15									
KL731JTTE18N*	18		10	2000	2.50	50				
KL731JTTE22N*	22									
KL731JTTE27N*	27			1500	4.00	25				
KL731JTTE33N*	33					15				
KL731JTTE39N*	39									
KL731JTTE47N*	47			1000	4.50	10				
KL731JTTE56N*	56									
KL731JTTE68N*	68			600	4.50	7.5				

* Add tolerance character (B, C, G, J)

For complete environmental specifications, please refer to pages 216.

applications and ratings (continued)

Part Designation	Inductance (nH)	Inductance Tolerance	Quality Factor Minimum	Self Resonant Frequency Minimum (MHz)	DC Resistance Maximum (Ω)	Allowable DC Current Maximum (mA)	Measured Frequency (MHz)				
KL732ATTE1N0*	1.0	C: ±0.2nH	20	13000	0.25	900	500				
KL732ATTE1N2*	1.2										
KL732ATTE1N5*	1.5			10000							
KL732ATTE1N8*	1.8			9000							
KL732ATTE2N2*	2.2		25		8000	800					
KL732ATTE2N7*	2.7				6000						
KL732ATTE3N3*	3.3				5000	0.50		700			
KL732ATTE3N9*	3.9				4500						
KL732ATTE4N7*	4.7				4000				500		
KL732ATTE5N6*	5.6				3000						
KL732ATTE6N8*	6.8	G: ±2% J: ±5%		20		2500		400	200		
KL732ATTE8N2*	8.2					2000				300	
KL732ATTE10N*	10					1500		1.00			
KL732ATTE12N*	12										
KL732ATTE15N*	15		15		1000	1.50		250			
KL732ATTE18N*	18				800					200	
KL732ATTE22N*	22		10		700	4.00	150				
KL732ATTE27N*	27				600	5.00					
KL732ATTE33N*	33		C: ±0.2nH	25	9000	0.25	1000	500			
KL732ATTE39N*	39									7000	
KL732ATTE47N*	47				6000						
KL732ATTE56N*	56	35			5000	0.50	900				
KL732ATTE68N*	68				4500						
KL732ATTE82N*	82				4000		800				
					3500						
				3000							
KL732BTTE2N2*	2.2	G: ±2% J: ±5%		40	2500	1.00	500		200		
KL732BTTE2N7*	2.7									2000	
KL732BTTE3N3*	3.3				1500						
KL732BTTE3N9*	3.9		25		1000	2.00	400				
KL732BTTE4N7*	4.7				500						
KL732BTTE5N6*	5.6			15			400				
KL732BTTE6N8*	6.8						200				
KL732BTTE8N2*	8.2										
KL732BTTE10N*	10										
KL732BTTE12N*	12										
KL732BTTE15N*	15										
KL732BTTE18N*	18										
KL732BTTE22N*	22										
KL732BTTE27N*	27										
KL732BTTE33N*	33										
KL732BTTE39N*	39										
KL732BTTE47N*	47										
KL732BTTE56N*	56										
KL732BTTE68N*	68										
KL732BTTE82N*	82										
KL732BTTE100*	100										

* Add tolerance character (B, C, G, J)

For complete environmental specifications, please refer to pages 216.

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

1/10/06

environmental applications

Performance Characteristics

Parameter	Requirements Maximum Limit	Δ L/L Typical	Test Method
Resistance to Soldering Heat	Without distinct damage in appearance and construction Δ L/L: $\pm 2\%$, Δ Q/Q: $\pm 20\%$	Δ L/L: $\pm 0.5\%$ Δ Q/Q: $\pm 1.5\%$	260°C $\pm$ 5°C, 10s $\pm$ 1s
Rapid Change of Temperature	Without distinct damage in appearance and construction Δ L/L: $\pm 2\%$, Δ Q/Q: $\pm 20\%$	Δ L/L: $\pm 0.5\%$ Δ Q/Q: $\pm 1.6\%$	-40°C (30min.)/ +125°C (30min.) 100 cycles
Low Temperature Exposure	Without distinct damage in appearance and construction Δ L/L: $\pm 2\%$, Δ Q/Q: $\pm 20\%$	Δ L/L: $\pm 0.7\%$ Δ Q/Q: $\pm 1.2\%$	-40°C $\pm$ 3°C, 1000h
High Temperature Exposure	Without distinct damage in appearance and construction Δ L/L: $\pm 2\%$, Δ Q/Q: $\pm 20\%$	Δ L/L: $\pm 0.4\%$ Δ Q/Q: $\pm 1.3\%$	125°C $\pm$ 2°C, 1000h
Moisture Exposure	Without distinct damage in appearance and construction Insulation resistance: 50M Ω or more Δ L/L: $\pm 2\%$, Δ Q/Q: $\pm 20\%$	Δ L/L: $\pm 0.4\%$ Δ Q/Q: $\pm 1.4\%$	40°C $\pm$ 2°C, 90%~95%RH, 1000h
Resistance to Solvent	Without distinct damage in appearance, construction and marking Δ L/L: $\pm 2\%$, Δ Q/Q: $\pm 20\%$	Δ L/L: $\pm 0.6\%$ Δ Q/Q: $\pm 1.2\%$	Immerse the inductors for 30s $\pm$ 5s in the reagent (20°C ~ 25°C) of JIS K8839 (1995)