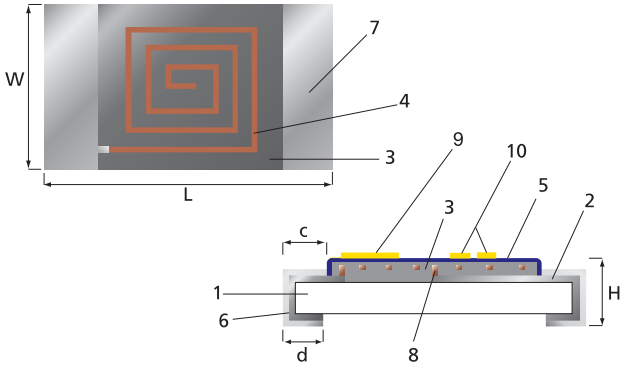
THIN FILM
CHIP INDUCTOR
KL73



STRUCTURE

1 Ceramic substrate
2 Cross electrode
3 Polymide insulated film
4 Cu thin film coil pattern
5 Epoxy protection film
6 Ni barrier
7 Solder plating
8 Via hole
9 Direction mark
10 Marking

IDENTIFICATION

PRODUCT CODE	COATING COLOR	MARKING
KL73 1H	Green	direction mark
KL73 1E	Dark blue	
KL73 1J, 2A		2 digits & direction mark
KL73 2B		3 digits & direction mark

Products with Pb-free terminations meet RoHS requirements

TYPE DESIGNATION (HOW TO ORDER)

Old Part No.	KL73	2B	C		TE	2N7	
New Part No. (Pb-free)	KL73	2B		T	TE	2N7	C
	PRODUCT CODE	STYLE 1H: 0201 1E: 0402 1J: 0603 2A: 0805 2B: 1206	INDUCTANCE TOLERANCE	TERMINATION SURFACE MATERIAL T: Sn L: Sn/Pb	TAPING* TB, TP, TE, BK *Please see "PACKAGING"	NOMINAL INDUCTANCE	INDUCTANCE TOLERANCE B, C, G, J

FEATURES

- Special thin-film multi-layer technology realizes low DCR and high Q
- High SRF and excellent characteristics for high frequency
- Low tolerance ± 2% availabe
- Small size allows high density mounting (0201 ... 1206)
- Suitable for automobile telephone, cordless phones, pagers and other telecommunication equipment
- Operating temperature range: - 40° C ... + 125° C
- Suitable for reflow and wave soldering
- Lab Kit availabe

DIMENSIONS (mm)

SIZE (inch)	TYPE	L	W	c	d	H
NEW 0201	KL73 1H	0.6 ± 0.03	0.3 ± 0.03	0.08 ±0.05	0.15 ± 0.05	0.24 ± 0.03
0402	KL73 1E	1.0 ± 0.1	0.5 ± 0.05	0.15 ± 0.1	0.25 ± 0.1	0.35 ± 0.05
0603	KL73 1J	1.6 ± 0.2	0.8 ± 0.1	0.3 ± 0.1	0.3 ± 0.1	0.5 ± 0.1
0805	KL73 2A	2.0 ± 0.2	1.25 ± 0.2	0.4 ± 0.2	0.3 ± 0.2	0.5 ± 0.1
1206	KL73 2B	3.2 ± 0.2	1.6 ± 0.2	0.5 ± 0.2	0.4 $^{+0.2}_{-0.1}$	0.6 ± 0.1

RATING

TYPE	MARKING	NOMINAL INDUCTANCE	INDUCTANCE TOLERANCE	QUALITY FACTOR (MIN.)	SELF-RESONANT FREQUENCY (MIN.)	DC RESISTANCE (MAX.)	ALLOWABLE DC CURRENT (MAX.)	MEASURING FREQUENCY
KL73 1H T TB 0N6 ☐	—	0.6 nH	B (± 0.1 nH), C (± 0.2 nH)	5	9000 MHz	0.20 Ω	350 mA	500 MHz
KL73 1H T TB 0N7 B	—	0.7 nH	B (± 0.1 nH)					
KL73 1H T TB 0N8 ☐	—	0.8 nH	B (± 0.1 nH), C (± 0.2 nH)					
KL73 1H T TB 0N9 B	—	0.9 nH	B (± 0.1 nH)					
KL73 1H T TB 1N0 ☐	—	1.0 nH	B (± 0.1 nH), C (± 0.2 nH)			0.30 Ω	300 mA	
KL73 1H T TB 1N1 B	—	1.1 nH	B (± 0.1 nH)			0.35 Ω		
KL73 1H T TB 1N2 ☐	—	1.2 nH	B (± 0.1 nH), C (± 0.2 nH)					
KL73 1H T TB 1N3 B	—	1.3 nH	B (± 0.1 nH)			0.50 Ω		
KL73 1H T TB 1N5 ☐	—	1.5 nH	B (± 0.1 nH), C (± 0.2 nH)					
KL73 1H T TB 1N6 B	—	1.6 nH	B (± 0.1 nH)			0.60 Ω	200 mA	
KL73 1H T TB 1N8 ☐	—	1.8 nH	B (± 0.1 nH), C (± 0.2 nH)					
KL73 1H T TB 2N0 B	—	2.0 nH	B (± 0.1 nH)		8000 MHz	0.70 Ω		
KL73 1H T TB 2N2 ☐	—	2.2 nH	B (± 0.1 nH), C (± 0.2 nH)					
KL73 1H T TB 2N4 B	—	2.4 nH	B (± 0.1 nH)					
KL73 1H T TB 2N7 ☐	—	2.7 nH	B (± 0.1 nH), C (± 0.2 nH)				130 mA	
KL73 1H T TB 3N0 B	—	3.0 nH	B (± 0.1 nH)		6000 MHz	1.00 Ω		
KL73 1H T TB 3N3 ☐	—	3.3 nH	B (± 0.1 nH), C (± 0.2 nH)					
NEW KL73 1H T TB 3N6 B	—	3.6 nH	B (± 0.1 nH)			1.30 Ω	120 mA	
KL73 1H T TB 3N9 ☐	—	3.9 nH	B (± 0.1 nH), C (± 0.1 nH)					
KL73 1H T TB 4N3 B	—	4.3 nH	B (± 0.1 nH)			1.50 Ω		
KL73 1H T TB 4N7 ☐	—	4.7 nH	B (± 0.1 nH), C (± 0.1 nH					
KL73 1H T TB 5N1 G	—	5.1 nH	G (± 2%)		4000 MHz	2.00 Ω	110 mA	
KL73 1H T TB 5N6 ☐	—	5.6 nH	G (± 2%), J(± 5%)					
KL73 1H T TB 6N2 G	—	6.2 nH	G (± 2%)			2.50 Ω		
KL73 1H T TB 6N8 ☐	—	6.8 nH	G (± 2%), J(± 5%)					
KL73 1H T TB 7N5 G	—	7.5 nH	G (± 2%)					
KL73 1H T TB 8N2 ☐	—	8.2 nH	G ±(2%), J(± 5%)					
KL73 1H T TB 9N1 G	—	9.1 nH	G (± 2%)					
KL73 1H T TB 10N ☐	—	10 nH	G ± (2%) J ± (5%)		2000 MHz	5.00 Ω	70 mA	
KL73 1H T TB 11N ☐	—	11 nH						
KL73 1H T TB 12N ☐	—	12 nH						
KL73 1H T TB 13N ☐	—	13 nH						
KL73 1H T TB 15N ☐	—	15 nH						
KL73 1H T TB 16N ☐	—	16 nH			1500 MHz			
KL73 1H T TB 18N ☐	—	18 nH						
KL73 1H T TB 20N ☐	—	20 nH			1000 MHz	6.00 Ω	50 mA	
KL73 1H T TB 22N ☐	—	22 nH						
KL73 1H T TB 24N ☐	—	24 nH						
KL73 1H T TB 27N ☐	—	27 nH						
KL73 1H T TB 33N ☐	—	33 nH			800 MHz	7.00 Ω	40 mA	200 MHz
KL73 1H T TB 39N ☐	—	39 nH						

☐ Enter the code for inductance tolerance (B, C, G, J) TB = 10.000 pcs/7"reel

THIN FILM CHIP INDUCTOR, KL73

RATING

TYPE	MARKING	NOMINAL INDUCTANCE	INDUCTANCE TOLERANCE	QUALITY FACTOR (MIN.)	SELF-RESONANT FREQUENCY (MIN.)	DC RESISTANCE (MAX.)	ALLOWABLE DC CURRENT (MAX.)	MEASURING FREQUENCY
KL73 1E ☐TP N56 B	—	0.56 nH	B (± 0.1 nH)	7	14000 MHz	0.10 Ω	700 mA	500 MHz
KL73 1E ☐TP N68 B	—	0.68 nH						
KL73 1E ☐TP N82 B	—	0.82 nH						
KL73 1E ☐TP 1N0 ☐	—	1.0 nH	B (± 0.1 nH) C (± 0.2 nH)	10	12000 MHz	0.15 Ω		
KL73 1E ☐TP 1N2 ☐	—	1.2 nH						
KL73 1E ☐TP 1N5 ☐	—	1.5 nH			10000 MHz	0.20 Ω		
KL73 1E ☐TP 1N8 ☐	—	1.8 nH						
KL73 1E ☐TP 2N2 ☐	—	2.2 nH			8000 MHz	0.25 Ω	650 mA	
KL73 1E ☐TP 2N7 ☐	—	2.7 nH						
KL73 1E ☐TP 3N3 ☐	—	3.3 nH			6000 MHz	0.30 Ω	600 mA	
KL73 1E ☐TP 3N9 ☐	—	3.9 nH				0.50 Ω	550 mA	
KL73 1E ☐TP 4N7 ☐	—	4.7 nH			5000 MHz		500 mA	
KL73 1E ☐TP 5N6 ☐	—	5.6 nH	G (± 2%) J (± 5%)			1.00 Ω	450 mA	
KL73 1E ☐TP 6N8 ☐	—	6.8 nH			4000 MHz		350 mA	
KL73 1E ☐TP 8N2 ☐	—	8.2 nH			3000 MHz			
KL73 1E ☐TP 10N ☐	—	10 nH			2500 MHz	1.50 Ω	300 mA	
KL73 1E ☐TP 12N ☐	—	12 nH					250 mA	
KL73 1E ☐TP 15N ☐	—	15 nH			2000 MHz	2.00 Ω	200 mA	
KL73 1E ☐TP 18N ☐	—	18 nH		7	1500 MHz	3.00 Ω	150 mA	200 MHz
KL73 1E ☐TP 22N ☐	—	22 nH				5.00 Ω		
KL73 1E ☐TP 27N ☐	—	27 nH						
KL73 1E ☐TP 33N ☐	—	33 nH			1000 MHz			
KL73 1J ☐TE 1N0 C	L1	1.0 nH	C (± 0.2 nH)	10	13000 MHz	0.10 Ω	650 mA	500 MHz
KL73 1J ☐TE 1N2 C	L2	1.2 nH		15				
KL73 1J ☐TE 1N5 C	L3	1.5 nH		20	10000 MHz			
KL73 1J ☐TE 1N8 C	L4	1.8 nH						
KL73 1J ☐TE 2N2 C	22	2.2 nH			8000 MHz	0.15 Ω	450 mA	
KL73 1J ☐TE 2N7 C	27	2.7 nH						
KL73 1J ☐TE 3N3 C	33	3.3 nH			6000 MHz	0.25 Ω		
KL73 1J ☐TE 3N9 C	39	3.9 nH						
KL73 1J ☐TE 4N7 C	47	4.7 nH			5000 MHz	0.50 Ω	350 mA	
KL73 1J ☐TE 5N6 ☐	56	5.6 nH	G (±2%) J (±5%)	25	4000 MHz			
KL73 1J ☐TE 6N8 ☐	68	6.8 nH						
KL73 1J ☐TE 8N2 ☐	82	8.2 nH			3000 MHz			
KL73 1J ☐ TE 10N ☐	10	10 nH			2500 MHz	1.00 Ω	250 mA	
KL73 1J ☐ TE 12N ☐	12	12 nH						
KL73 1J ☐ TE 15N ☐	15	15 nH			2000 MHz			
KL73 1J ☐ TE 18N ☐	H1	18 nH		10	1500 MHz	1.50 Ω	200 mA	200 MHz
KL73 1J ☐ TE 22N ☐	H2	22 nH						
KL73 1J ☐ TE 27N ☐	H3	27 nH			1000 MHz	2.50 Ω	150 mA	
KL73 1J ☐ TE 33N ☐	H4	33 nH						
KL73 1J ☐ TE 39N ☐	H5	39 nH						
KL73 1J ☐ TE 47N ☐	H6	47 nH					120 mA	
KL73 1J ☐ TE 56N ☐	H7	56 nH			600 MHz	4.00 Ω	100 mA	
KL73 1J ☐ TE 68N ☐	H8	68 nH				4.50 Ω		
KL73 1J ☐ TE 82N ☐	H9	82 nH				5.00 Ω		
KL73 2A ☐ TE 1N0 C	1.0	1.0 nH	C (±0.2 nH)	20	13000 MHz	0.25 Ω	900 mA	500 MHz
KL73 2A ☐ TE 1N2 C	1.2	1.2 nH						
KL73 2A ☐ TE 1N5 C	1.5	1.5 nH			10000 MHz			
KL73 2A ☐ TE 1N8 C	1.8	1.8 nH		25	9000 MHz			
KL73 2A ☐ TE 2N2 C	2.2	2.2 nH			8000 MHz		800 mA	
KL73 2A ☐ TE 2N7 C	2.7	2.7 nH						
KL73 2A ☐ TE 3N3 C	3.3	3.3 nH			6000 MHz			
KL73 2A ☐ TE 3N9 C	3.9	3.9 nH						
KL73 2A ☐ TE 4N7 C	4.7	4.7 nH			5000 MHz	0.50 Ω	700 mA	
KL73 2A ☐ TE 5N6 ☐	5.6	5.6 nH	G (±2%) J (±5%)		4500 MHz			
KL73 2A ☐ TE 6N8 ☐	6.8	6.8 nH			4000 MHz		500 mA	
KL73 2A ☐ TE 8N2 ☐	8.2	8.2 nH			3000 MHz			
KL73 2A ☐ TE 10N ☐	10	10 nH			2500 MHz	1.00 Ω	400 mA	
KL73 2A ☐ TE 12N ☐	12	12 nH						
KL73 2A ☐ TE 15N ☐	15	15 nH			2000 MHz		300 mA	
KL73 2A ☐ TE 18N ☐	18	18 nH		20	1500 MHz			
KL73 2A ☐ TE 22N ☐	22	22 nH			1000 MHz	1.50 Ω	250 mA	200 MHz
KL73 2A ☐ TE 27N ☐	27	27 nH		15			200 mA	
KL73 2A ☐ TE 33N ☐	33	33 nH						
KL73 2A ☐ TE 39N ☐	39	39 nH			800 MHz			
KL73 2A ☐ TE 47N ☐	47	47 nH						
KL73 2A ☐ TE 56N ☐	56	56 nH		10	700 MHz	4.00 Ω	150 mA	
KL73 2A ☐ TE 68N ☐	68	68 nH				4.50 Ω		
KL73 2A ☐ TE 82N ☐	82	82 nH			600 MHz			

☐ Enter the code for termination surface material (T, L) ☐ Enter the code for inductance tolerance (B, C, G, J) TP = 10.000 pcs/7"reel; TE = 4.000 pcs/7"reel

THIN FILM CHIP INDUCTOR, KL73

RATING

TYPE	MARKING	NOMINAL INDUCTANCE	INDUCTANCE TOLERANCE	QUALITY FACTOR (MIN.)	SELF-RESONANT FREQUENCY (MIN.)	DC RESISTANCE (MAX.)	ALLOWABLE DC CURRENT (MAX.)	MEASURING FREQUENCY
KL73 2B ⬚ TE 2N2 C	2N2	2.2 nH	C (±0.2 nH)	25	9000 MHz	0.25 Ω	1000 mA	500 MHz
KL73 2B ⬚ TE 2N7 C	2N7	2.7 nH			7000 MHz			
KL73 2B ⬚ TE 3N3 C	3N3	3.3 nH			6000 MHz			
KL73 2B ⬚ TE 3N9 C	3N9	3.9 nH		35	5000 MHz		900 mA	
KL73 2B ⬚ TE 4N7 C	4N7	4.7 nH			4500 MHz	0.50 Ω		
KL73 2B ⬚ TE 5N6 ☐	5N6	5.6 nH	G (±2%) J (±5%)		4000 MHz			
KL73 2B ⬚ TE 6N8 ☐	6N8	6.8 nH			3500 MHz		800 mA	
KL73 2B ⬚ TE 8N2 ☐	8N2	8.2 nH			3000 MHz			
KL73 2B ⬚ TE 10N ☐	10N	10 nH		40	2500 MHz			
KL73 2B ⬚ TE 12N ☐	12N	12 nH						
KL73 2B ⬚ TE 15N ☐	15N	15 nH			2000 MHz	1.00 Ω	500 mA	
KL73 2B ⬚ TE 18N ☐	18N	18 nH						
KL73 2B ⬚ TE 22N ☐	22N	22 nH			1500 MHz			
KL73 2B ⬚ TE 27N ☐	27N	27 nH		25				200 MHz
KL73 2B ⬚ TE 33N ☐	33N	33 nH			1000 MHz	2.00 Ω	400 mA	
KL73 2B ⬚ TE 39N ☐	39N	39 nH						
KL73 2B ⬚ TE 47N ☐	47N	47 nH						
KL73 2B ⬚ TE 56N ☐	56N	56 nH		15	500 MHz			
KL73 2B ⬚ TE 68N ☐	68N	68 nH					200 mA	
KL73 2B ⬚ TE 82N ☐	82N	82 nH			400 MHz			
KL73 2B ⬚ TE 100 ☐	100	100 nH						

⬚ Enter the code for termination surface material (T, L) TE = 4.000 pcs/7"reel

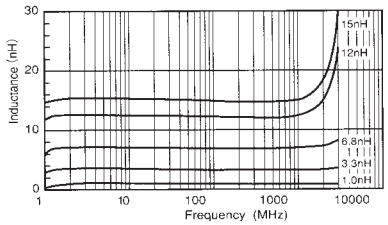
☐ Enter the code for inductance tolerance (C, G, J)

TYPICAL FREQUENCY CHARACTERISTICS

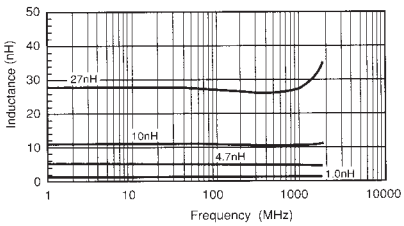
Test equipment: Agilent E4991A impedance analyzer (1H); HP4291B impedance analyzer (1E, 1J, 2A, 2B)

INDUCTANCE vs. FREQUENCY

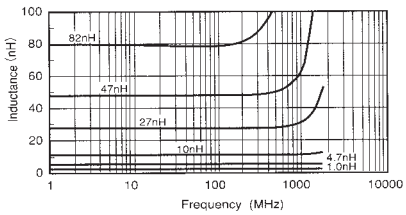
KL73 1H



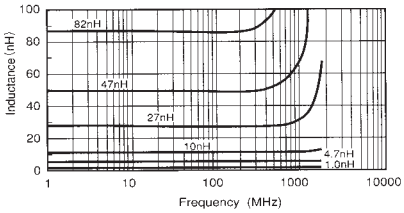
KL73 1E



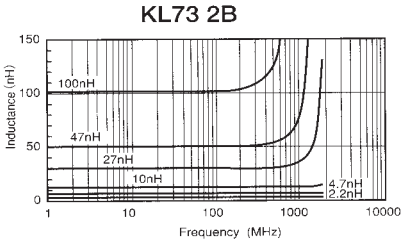
KL73 1J



KL73 2A

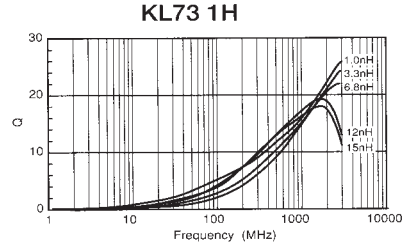


KL73 2B

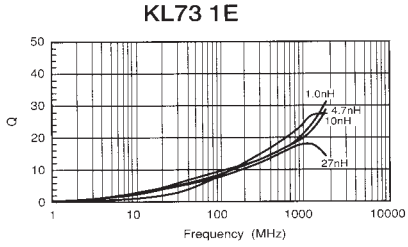


Q-FACTOR vs. FREQUENCY

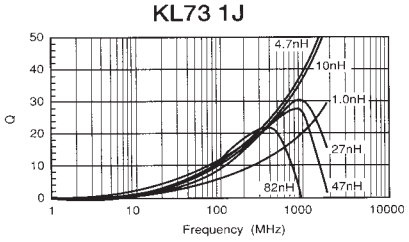
KL73 1H



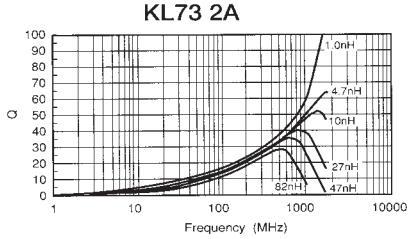
KL73 1E



KL73 1J



KL73 2A



KL73 2B