KOA SPEER ELECTRONICS, INC.

Surface Mount High Q Wirewound Inductors

- *Excellent high frequency applications*
- *High Q factors and self-resonant frequency values*
- *Flat top suitable for high speed pick-and-place components*
- *RoHS compliant*

KQ & KQT Series Specifications

Part Number Determination

KQ1008LTE10NJ					
KQ	**1008**	**L**	**TE**	**10N**	**J**
SERIES	SIZE	TERMINATION	PACKAGING	INDUCTANCE	TOLERANCE
KQ KQT	0402 0603 0805 1008	L=SnPb (Tin/Lead) T=Sn (100% Tin)	TE=7" embossed plastic tape TD=7% paper tape	10N=10nH R10=0.1uH 1R0=1.0uH	C=0.2nH G=±2% H=±3% J=±5% K=±10% M=±20

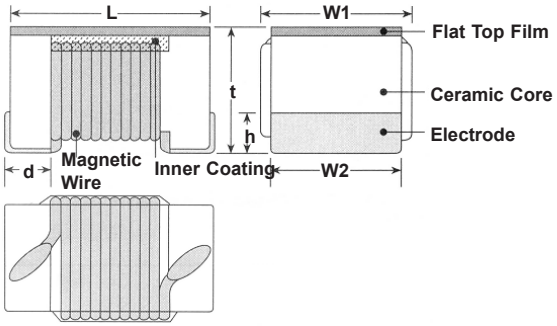
Package Dimensions (in/mm)

Size	L	W1	W2	t	h	d
0402	0.39±.004 (1.0±0.1)	0.2±.004 (0.5±0.1)	.02±.004 (0.5±0.1)	.022±.004 (0.55±0.1)	.006±.004 (0.15±0.1)	0.1±.004 (0.25±0.1)
0603	.063 ±.004 (1.6±0.1)	.039±.004 (1.0±0.1)	.033±.004 (0.85±0.1)	.035±.004 (0.9±0.1)	.01±.006 (0.25±0.15)	.014±.004 (0.35±0.1)
0805	.079±.008 2.0±0.2	.059±008 1.5±0.2	.053±.004 1.35±0.1	.051±.008 1.3±0.2	.016±.006 0.40±0.15	.018±.004 0.45±0.1
1008	.098±.008 2.5±0.2	.087±.008 2.2±0.2	.079±.004 2.0±0.1	.071+.008-0 1.8+0.2-0	.018±.006 0.45±0.15	.018±.004 0.45±0.1

Electrical Characteristics (0402)

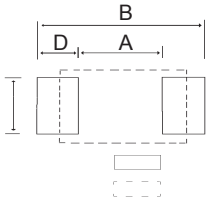
Part Number	Case Size	Inductance		Quality Factor		SRF min. (MHz)	DC. Res. Max.	Allowable DC Current max. (mA)	Meas. Freq. (MHz)
		Ind. (nH)	Tol. (%)	Q min	Freq. (MHz)				
KQT0402TTD1N0	0402	1.0	C:0.2nH	16	250	6000	0.045	1360	250
KQT0402TTD2N0		2.0					0.070	1040	
KQT0402TTD2N2		2.2		19				960	
KQT0402TTD3N3		3.3					0.066	840	
KQT0402TTD3N6		3.6							
KQT0402TTD3N9		3.9				5800			
KQT0402TTD5N1		5.1	H: ±3% J: ±5% K: ±10%	20			0.083	800	
KQT0402TTD5N6		5.6						760	
KQT0402TTD6N2		6.2							
KQT0402TTD7N5		7.5		22			0.104	680	
KQT0402TTD8N2		8.2				4400			
KQT0402TTD9N0		9.0				4160			
KQT0402TTD10N		10		21		3900	0.195	480	
KQT0402TTD11N		11		24		3680	0.120	640	
KQT0402TTD12N		12				3600			
KQT0402TTD15N		15				3280	0.172	560	
KQT0402TTD19N		19				3040	0.202	480	
KQT0402TTD23N		23				2720	0.214	400	
KQT0402TTD27N		27				2480	0.298		
KQT0402TTD34N		34				2400	0.550	340	
KQT0402TTD36N		36				2320	0.560	320	
KQT0402TTD40N		40				2240	0.620		
KQT0402TTD47N		47		20		2100	0.830	150	
KQT0402TTD56N		56		25		2800	1.170	200	
KQT0402TTD68N		68		22		2000	1.120		
KQT0402TTD82N		82				1800	1.800	140	
KQT0402TTD10		100				1600	2.090	130	
KQT0402TTD12		120				1500	2.320	120	

Construction



Land Pattern (mm)

Size	Dimension	A	B	C	D
0402	1.0X0.5	0.45	1.18	0.66	0.36
0603	1.6X1.0	0.64	1.92	1.02	0.64
0805	2.0X1.5	0.76	2.8	1.78	0.016
1008	2.5X2.2	1.27	3.31	2.54	1.0



Engineering Design Kits Available
See Garrett Kit Catalog

(specifications continued on following pages)

KOA SPEER ELECTRONICS, INC.

Surface Mount High Q Wirewound Inductors

KQ 0603 Series Specifications

Electrical Characteristics (0603)

Part Number	Case Size	Marking	Inductance		Quality Factor		SRF min. (MHz)	DC Res. Max. (W)	Allowable DC Current max. (mA)	Meas. Freq. Mhz
			Ind. (nH)	Tol. (%)	Q min.	Freq. (MHz)				
KQ0603TTE1N6	0603	C	1.6	J: ±5% K: ±10%	24	250	12500	0.03	700	250
KQ0603TTE1N8		0	1.8		16			0.045		
KQ0603TTE3N3		X	3.3		22		6900	0.055		
KQ0603TTE3N6		E	3.6					0.063		
KQ0603TTE3N9		1	3.9					0.08		
KQ0603TTE4N3		F	4.3				5900	0.063		
KQ0603TTE4N7		G	4.7		20		5800	0.116		
KQ0603TTE5N1		Y	5.1					0.115		
KQ0603TTE6N8		2	6.8	G: ±2% J: ±5% K: ±10%	27			0.11		
KQ0603TTE7N5		H	7.5		28		4800	0.106		
KQ0603TTE8N2		A	8.2					0.12		
KQ0603TTE8N7		J	8.7				4600	0.109		
KQ0603TTE9N5		B	9.5				4800	0.125		
KQ0603TTE10N		3	10		31			0.13		
KQ0603TTE11N		K	11		33		4000	0.086		
KQ0603TTE12N		4	12		35			0.13		
KQ0603TTE15N		5	15					0.17		
KQ0603TTE16N		L	16		34		3300	0.104		
KQ0603TTE18N		6	18		35		3100	0.17		
KQ0603TTE22N		7	22		38		3000	0.19		
KQ0603TTE23N		S	23		37		2700	0.15		
KQ0603TTE24N		M	24				2650	0.135		
KQ0603TTE27N		8	27		40		2800	0.22	600	
KQ0603TTE30N		N	30		37		2250	0.144		
KQ0603TTE33N		9	33		40		2300	0.22		
KQ0603TTE36N		P	36		38		2080	0.25		
KQ0603TTE39N		0	39		40		2200			
KQ0603TTE43N		Q	43		39		2000	0.28		
KQ0603TTE47N		1	47		38	200				200
KQ0603TTE51N		T	51				1900	0.30		
KQ0603TTE56N		2	56					0.31		
KQ0603TTE68N		3	68		37			0.34		
KQ0603TTE72N		4	72		34	150	1700	0.49	400	150
KQ0603TTE82N		5	82					0.54		
KQ0603TTER10		6	100				1400	0.58		
KQ0603TTER11		7	110		32		1350	0.61	300	
KQ0603TTER12		8	120				1300	0.65		
KQ0603TTER15		9	150				1400	0.92	280	
KQ0603TTER18		0	180		25	100	1300	2.2	140	100
KQ0603TTER20		U	200				1200	2.3	130	
KQ0603TTER21		V	210							
KQ0603TTER22		1	220					2.5	120	
KQ0603TTER25		W	250		24		1000	2.4		
KQ0603TTER27		2	270				900	2.3	170	
KQ0603TTER33		3	330		30		800	3.0	100	
KQ0603TTER39		4	390				700	3.7	80	

(specifications continued on following page)

KOA SPEER ELECTRONICS, INC.

Surface Mount High Q Wirewound Inductors

KQ 0805 Series Specifications

Electrical Characteristics (0805)

Part Number	Case Size	Marking	Inductance		Quality Factor		SRF min. (MHz)	DC. Res. Max.	Allowable DC Current max. (mA)	Meas. Freq. (MHz)
			Ind. (nH)	Tol. (%)	Q min	Freq. (MHz)				
KQ0805TTE3N3	0805	0	3.3	J(±5%) K(±10%) M(±20%)	50	1500	6000	0.08	600	250
KQ0805TTE6N8		1	6.8			1000	5500	0.11		
KQ0805TTE8N2		2	8.2				4700	0.12		
KQ0805TTE12N		3	12			500	4000	0.15		
KQ0805TTE15N		4	15				3400	0.17		
KQ0805TTE18N		5	18				3300	0.20		
KQ0805TTE22N		6	22		55		2600	0.22	500	
KQ0805TTE27N		7	27				2500	0.25		
KQ0805TTE33N		8	33		60		2050	0.27		
KQ0805TTE39N		9	39				2000	0.29		
KQ0805TTE47N		0	47				1650	0.31		200
KQ0805TTE56N		1	56	G(±2%) J(±5%) K(±10%)			1550	0.34		
KQ0805TTE68N		2	68				1450	0.38		
KQ0805TTE82N		3	82		65		1300	0.42	400	150
KQ0805TTER10		4	100				1200	0.46		
KQ0805TTER12		5	120		50	250	1100	0.51		
KQ0805TTER15		6	150				920	0.56		100
KQ0805TTER18		7	180				870	0.64		
KQ0805TTER22		8	220				850	0.70		
KQ0805TTER27		9	270		48		650	1.0	350	
KQ0805TTER33		0	330				600	1.4	310	
KQ0805TTER39		1	390				560	1.5	290	
KQ0805TTER47		2	470	J(±5%) K(±10%	33	100	375	1.76	250	50
KQ0805TTER56		3	560		23	50	340	1.9	230	25
KQ0805TTER68		4	680				188	2.2	190	
KQ0805TTER82		5	820				215	2.35	180	

(specifications continued on following page)

KOA SPEER ELECTRONICS, INC.

Surface Mount High Q Wirewound Inductors

KQ 1008 Series Specifications

Electrical Characteristics (1008)

Part Number	Case Size	Marking	Inductance		Quality Factor		SRF min. (MHz)	DC Res. Max. (W)	Allowable DC Current max. (mA)	Meas. Freq. Mhz
			Ind. (nH)	Tol. (%)	Q min.	Freq. (MHz)				
KQ1008TTE10N	1008	10N	10	K(±10%) M(±20%)	50	500	4100	0.08	1000	50
KQ1008TTE12N		12N	12				3300	0.09		
KQ1008TTE15N		15N	15				3000	0.10		
KQ1008TTE18N		18N	18		55	350	2500	0.11		
KQ1008TTE22N		22N	22				2400	0.12		
KQ1008TTE27N		27N	27		60		1600	0.13		
KQ1008TTE33N		33N	33					0.14		
KQ1008TTE39N		39N	39		65		1500	0.15		
KQ1008TTE47N		47N	47					0.16		
KQ1008TTE56N		56N	56	K(±10%) J(±5%)			1300	0.18		
KQ1008TTE68N		68N	68					0.20		
KQ1008TTE82N		82N	82		60		1000	0.22		
KQ1008TTER10		R10	100					0.56	800	25
KQ1008TTER12		R12	120				950	0.63		
KQ1008TTER15		R15	150		45	100	850	0.70		
KQ1008TTER18		R18	180				750	0.77	750	
KQ1008TTER22		R22	220				700	0.84	720	
KQ1008TTER27		R27	270				600	0.91	690	
KQ1008TTER33		R33	330				570	1.05	660	
KQ1008TTER39		R39	390				500	1.12	630	
KQ1008TTER47		R47	470				450	1.19	600	
KQ1008TTER56		R56	560				415	1.33	580	
KQ1008TTER62		R62	620				375	1.40	560	
KQ1008TTER68		R68	680					1.47	540	
KQ1008TTER75		R75	750				360	1.54	520	
KQ1008TTER82		R82	820				350	1.61	500	
KQ1008TTER91		R91	910		35	50	320	1.68	480	
KQ1008TTE1R0		1R0	1000				290	1.75	460	
KQ1008TTE1R2		1R2	1200				250	2.0	440	7.9
KQ1008TTE1R5		1R5	1500		28		200	2.3	420	
KQ1008TTE1R8		1R8	1800				160	2.6	400	
KQ1008TTE2R2		2R2	2200					2.8	380	
KQ1008TTE2R7		2R7	2700		22	25	140	3.2	360	
KQ1008TTE3R3		3R3	3300				110	3.4	350	
KQ1008TTE3R9		3R9	3900		20		100	3.6	340	
KQ1008TTE4R7		4R7	4700				90	4.0	330	
KQ1008TTE5R6		5R6	5600		15	7.9	80	2.2	150	
KQ1008TTE6R8		6R8	6800				70	2.5		
KQ1008TTE8R2		8R2	8200				65	2.8		
KQ1008TTE100		100	10000				60	3.2		