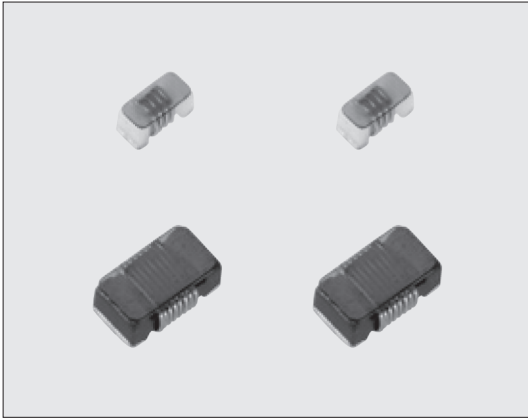


AIR CORE INDUCTORS



KQC 空芯片式电感器 (高Q值/高电流型) Air-Core Chip Inductors (High Q/High Current type)



外观颜色：白色 Body color : White (0402,0403)
 : 黑色 : Black (0603)

特点 Features

- 比起本公司原有品种，直流阻抗小，允许电流大。
- 比起本公司原有品种，高Q值型。
- 对应回流焊接。
- 对应欧盟RoHS。
- Lower DC resistance and higher allowable DC current than the existing model.
- High Q than the existing model.
- Suitable for reflow soldering.
- Products meet EU-RoHS requirements.

用途 Applications

- 移动通信设备的终端、基站的高频电路和功率放大器电路。
- 对移动通信设备需要高Q的电路适用。
- Terminals of mobile communication equipment etc. and high frequency and power amp. circuits.
- Suitable for circuits that need high Q of mobile communication equipment.

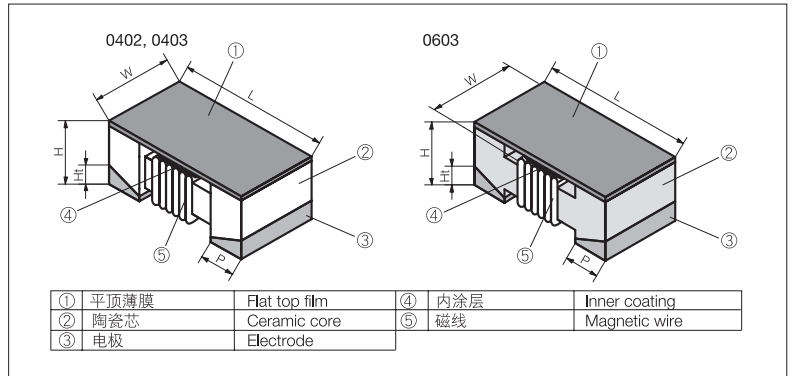
性能 Performance

试验项目 Test Items	标准值 Performance Requirements Maximum $\Delta L/L$ Maximum $\Delta Q/Q$		试验方法 Test Methods
	保证值 Limit	代表值 Typical	
耐焊接热 Resistance to soldering heat	$\Delta L/L: \pm 5\%$, $\Delta Q/Q: \pm 10\%$ 外观应无显著异常。 Without distinct damage in appearance.	$\Delta L/L: \pm 1.2\%$ $\Delta Q/Q: \pm 2.7\%$	260°C $\pm 5^\circ\text{C}$, 10s $\pm 1\text{s}$
温度突变 Rapid change of temperature	$\Delta L/L: \pm 5\%$, $\Delta Q/Q: \pm 10\%$ 外观应无显著异常。 Without distinct damage in appearance.	$\Delta L/L: \pm 1.9\%$ $\Delta Q/Q: \pm 3.9\%$	-40°C (30min.) / +125°C (30min.) 100 cycles
低温放置 Low temperature exposure	$\Delta L/L: \pm 5\%$, $\Delta Q/Q: \pm 10\%$ 外观应无显著异常。 Without distinct damage in appearance.	$\Delta L/L: \pm 2.0\%$ $\Delta Q/Q: \pm 4.1\%$	-40°C $\pm 2^\circ\text{C}$, 1000h
高温放置 High temperature exposure	$\Delta L/L: \pm 5\%$, $\Delta Q/Q: \pm 10\%$ 外观应无显著异常。 Without distinct damage in appearance.	$\Delta L/L: \pm 1.8\%$ $\Delta Q/Q: \pm 3.3\%$	125°C $\pm 2^\circ\text{C}$, 1000h
耐湿性 Moisture endurance	$\Delta L/L: \pm 5\%$, $\Delta Q/Q: \pm 10\%$ 外观应无显著异常。 Without distinct damage in appearance.	$\Delta L/L: \pm 1.7\%$ $\Delta Q/Q: \pm 3.3\%$	40°C $\pm 2^\circ\text{C}$, 90%~95%RH, 1000h
耐溶剂性 Resistance to solvent	应无表示消失等异常。 No damage and marking shall remain legible.	-	MIL-STD-202F试验法215 Accordance with MIL-STD 202F Method 215

使用注意事项 Precautions for Use

- 由于焊接区模式的大小对Q值会产生影响，因此，应在事前在实际设备上确认其特性。
- The pattern size of pad may affect Q values, so confirm the characteristics beforehand by actual machines.

结构图 Construction



外形尺寸 Dimensions

型号 Type	尺寸 Dimensions (mm)						Weight (g) (1000pcs)
	L ± 0.1	W	H ± 0.1	Ht	P ± 0.1		
KQC0402	1.0	0.5 ± 0.1	0.55	0.15 ± 0.10	0.2	1	
KQC0603	1.6	1.05 ± 0.2	0.7	0.20 ± 0.15	0.37	5	

品名构成 Type Designation

实例 Example	品种 Product Code	形状 Style	端子表面材质 Terminal Surface Material	二次加工 Taping	公称电感 Nominal Inductance	L值允许偏差 Inductance Tolerance
KQC	0603	T	TE	12N	J	
	0402: 1.0x0.5mm 0603: 1.6x1.0mm	T: Sn	TP: 2mm pitch paper(0402) TD: 4mm pitch paper(0402) TE: 4mm pitch plastic embossed (0603) BK: Bulk	3 digits	B: $\pm 0.1\text{nH}$ C: $\pm 0.2\text{nH}$ G: $\pm 2\%$ J: $\pm 5\%$	

预知关于此产品含有的环境负荷物质详情(除EU-RoHS以外)，请与我们联系。
编带细节请参考卷末附录C。

Contact us when you have control request for environmental hazardous material other than the substance specified by EU-RoHS.

For further information on taping, please refer to APPENDIX C on the back pages.

■ 额定值 Ratings

使用温度范围 Operating temperature range: $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$

编带符号和包装数/卷 Taping code and Q'ty/Reel: 0402: TP (10,000pcs) • TD (2,000pcs), 0603: TE (2,000pcs)

型号 Type	公称电感 Nominal Inductance (nH)	L测定频率 L Measuring Frequency (MHz)	电感允许偏差 Inductance Tolerance	Q值 Quality Factor Min.	Q测定频率 Q Measuring Frequency (MHz)	自共振频率 Self Resonant Frequency (GHz)	直流阻抗 DC Resistance (Ω) Max.	容许直流电流 Allowable DC Current (A) Max.
KQC0402T□□1N4B	1.4	250	B: $\pm 0.1\text{nH}$	25	250	11.0	0.019	1.40
KQC0402T□□1N5B	1.5							
KQC0402T□□1N6B	1.6							
KQC0402T□□1N7B	1.7							
KQC0402T□□2N5C	2.5							
KQC0402T□□2N7C	2.7							
KQC0402T□□3N0C	3.0		C: $\pm 0.2\text{nH}$	27		8.5	0.028	1.20
KQC0402T□□3N3C	3.3							
KQC0402T□□3N9C	3.9							
KQC0402T□□4N3C	4.3							
KQC0402T□□4N7C	4.7							
KQC0402T□□6N2C	6.2							
KQC0603 TTE 1N2J	1.2	250	J: $\pm 5\%$	18	250	6.0	0.020	2.25
KQC0603 TTE 2N7J	2.7							
KQC0603 TTE 4N7J	4.7							
KQC0603 TTE 5N6J	5.6							
KQC0603 TTE 7N5J	7.5							
KQC0603 TTE 8N2J	8.2							
KQC0603 TTE 10N□	10		G: $\pm 2\%$ J: $\pm 5\%$	35		3.0	0.025	2.00
KQC0603 TTE 12N□	12							
KQC0603 TTE 15N□	15							
KQC0603 TTE 18N□	18							
KQC0603 TTE 22N□	22							
KQC0603 TTE 27N□	27							
						5.5	0.035	1.80
						4.0	0.045	1.50
						2.5	0.065	1.25
							0.055	1.40
							0.065	1.25
							0.090	1.20
							0.100	1.10
							0.120	1.00

在型号□□中应放入编带符号。请在品名构成栏中确认。

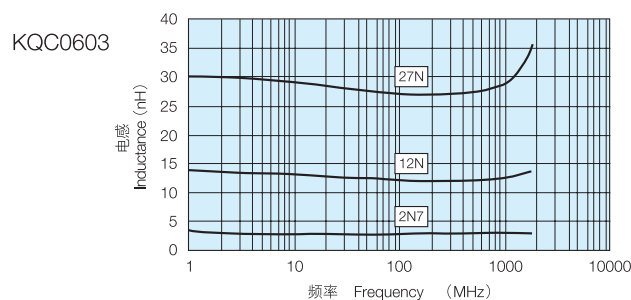
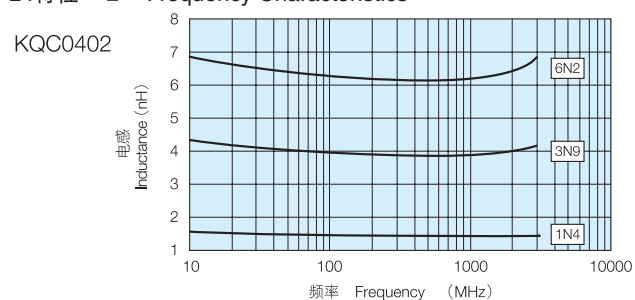
The codes for taping enter □□. Please confirm the column of type designation.

型号中□放入电感允许偏差符号(G、J)。 The code for inductance tolerance (G, J) enters □.

■ 特性 Characteristics

测定器 Test equipment: Agilent 4991A Impedance analyzer (KQC0402)
Agilent 4291A Impedance analyzer (KQC0603)

L-f特性 L – Frequency Characteristics



Q-f特性 Q – Frequency Characteristics

