



HLTGP0402

FEATURES 特性

1. High Q value and high self-resonant frequency with Ferrite material.
高Q值高SRF的铁氧体材料.
2. Small chip suitable for surface mounting.
小尺寸，表面贴装.
3. Tight inductance tolerance and high reliability.
高精度，高可靠性.

APPLICATIONS 用途

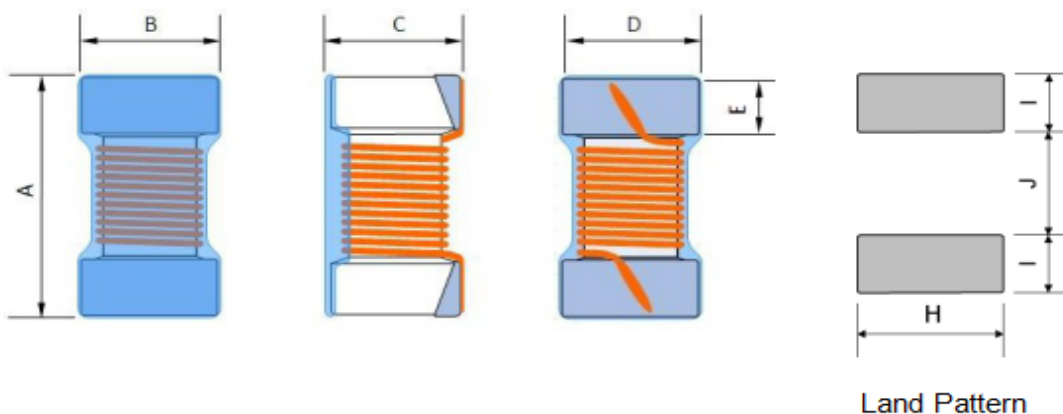
1. Mobile phone TD-LTE/5G communication.
移动电话，TD-LTE，5G通讯.
2. High frequency circuit in communication equipments.
高频线路的通讯设备.
3. Bluetooth，W-LAN，Broadband network.
蓝牙，无线宽带网络.

PART NUMBERING SYSTEM 品名系统

HLTGP	0420	- 220NH/	J
(1)	(2)	(3)	(4)

- (1) Type 型号 (2) External Dimensions外形尺寸 (3) Inductance 电感值
(4) Inductance Tolerance 电感值公差 (J: $\pm 5\%$ K: $\pm 10\%$ M: $\pm 20\%$)

SHAPES AND DIMENSIONS 外形尺寸 (Unit:mm)

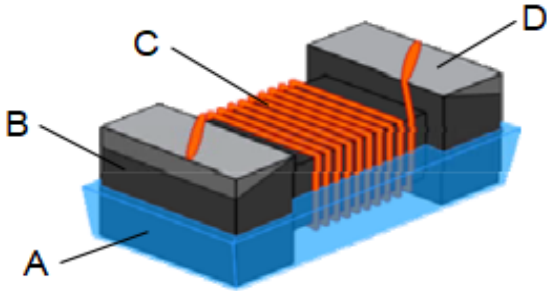


TYPE(型号)	A	B	C	D	E	H	I	J
HLTGP0402	1.1 \pm 0.1	0.6 \pm 0.1	0.55 \pm 0.1	0.5 \pm 0.1	0.2 \pm 0.1	0.65 ref	0.35 ref	0.50 ref



Product title	Size (LxWxH)	Inductance	Rated current
HLTGP0402	1.1±0.1mm/0.6±0.1mm/0.55±0.1mm	20~560nH	1600~200mA

STRUCTURE AND MATERIAL 结构与材料



Part	Components	Material
A	Coating	Ultraviolet epoxy resin
B	Core	Ferrite
C	Wire	Polyurethane enameled copper wire
D	Electrodes	Ag/Ag-Pd with Ni and Sn plating

ELECTRICAL CHARACTERISTICS 电特性

1. Operating and storage temperature range (individual chip without packing): -25°C to $+125^{\circ}\text{C}$
2. Storage temperature range (packaging conditions): -10°C ~ $+40^{\circ}\text{C}$ and RH 70% (Max.)

TEST AND MEASUREMENT PROCEDURES 测试和测量程序

1. Inductance (L)

Test equipment: Keysight E4991B / Agilent 16197A or equivalent
Test signal: -13dBm or 10mA

2. DC Resistance (DCR)

Test equipment: Agilent34420A / Agilent 4338B or equivalent

3. Q Factor (Q)

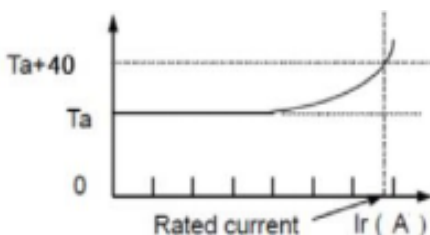
Test equipment: Keysight E4991B / Agilent 16197A or equivalent

4. Self-Resonant Frequency (SRF)

Test equipment: Keysight E4991B / Agilent 16197A / HP 8753E or equivalent
Test signal: -20dBm or 50 mV

5. Rated Current (Irms)

Irms is direct electric current as chip surface temperature rose just 20 against chip initial surface temperature (T_a)





RECOMMENDED SOLDERING TECHNOLOGIES 推荐的焊接技术

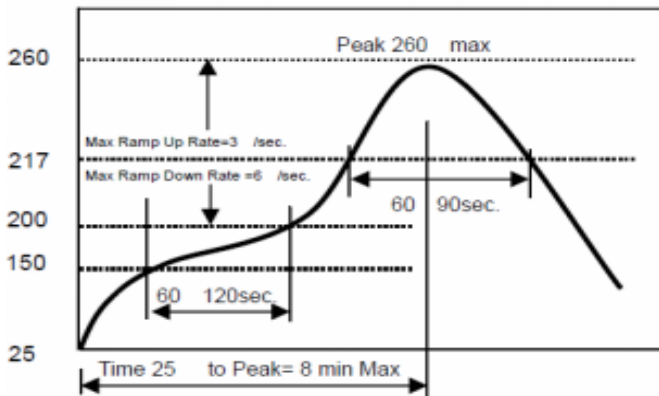
Re-flowing Profile

Preheat condition: 150~200 /60~120sec. Allowed time above 217C: 60~90sec.

Max temp: 260

Max time at max temp: 10sec Solder paste: Sn/3.0Ag/0.5Cu Allowed

Reflow time: 2 times max



SPECIFICATION TABLE:

HLTGP0402 Series

Part Number	Inductance	Tolerance	Quality Factor	L/Q Test Freq.	Max. DC Resistance	Max. Rated Current	Self-resonant Frequency
Symbol	L		Q (Typ)	Freq.	DCR	I _{rms}	SRF (Min)
Units				MHz	Ω	mA	MHz
HLTGP0402-20nH/□	20nH	J,K,M	10	100	0.050	1600	2600
HLTGP0402-22nH/□	22nH	J,K,M	10	100	0.072	1300	2500
HLTGP0402-33nH/□	33nH	J,K,M	10	100	0.060	1400	2300
HLTGP0402-36nH/□	36nH	J,K,M	10	100	0.092	1000	2300



HLTGP0402-39nH/□	39nH	J,K,M	10	100	0.150	830	2200
HLTGP0402-51nH/□	51nH	J,K,M	10	100	0.070	1100	1930
HLTGP0402-56nH/□	56nH	J,K,M	10	100	0.125	900	1900
HLTGP0402-72nH/□	72nH	J,K,M	10	100	0.100	900	1650
HLTGP0402-78nH/□	78nH	J,K,M	10	100	0.190	850	1600
HLTGP0402-100nH/□	100nH	J,K,M	9	100	0.160	900	1400
HLTGP0402-140nH/□	140nH	J,K,M	11	50	0.260	540	1220
HLTGP0402-180nH/□	180nH	J,K,M	11	50	0.330	560	1150
HLTGP0402-200nH/□	200nH	J,K,M	11	50	0.440	400	1000
HLTGP0402-220nH/□	220nH	J,K,M	11	50	0.530	380	1150
HLTGP0402-250nH/□	250nH	J,K,M	11	25	0.450	520	900
HLTGP0402-270nH/□	270nH	J,K,M	11	25	0.550	360	860
HLTGP0402-300nH/□	300nH	J,K,M	11	25	0.410	420	860
HLTGP0402-330nH/□	330nH	J,K,M	11	7.9	0.680	350	820
HLTGP0402-360nH/□	360nH	J,K,M	11	7.9	0.575	360	810
HLTGP0402-390nH/□	390nH	J,K,M	11	7.9	0.890	300	760
HLTGP0402-420nH/□	420nH	J,K,M	11	7.9	1.100	340	700
HLTGP0402-470nH/□	470nH	J,K,M	11	7.9	0.730	310	650
HLTGP0402-560nH/□	560nH	J,K,M	11	7.9	1.100	200	600

: Please specify the inductance tolerance code (J=±5%, K=±10%, M=±20%).