



HLTGP0805

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

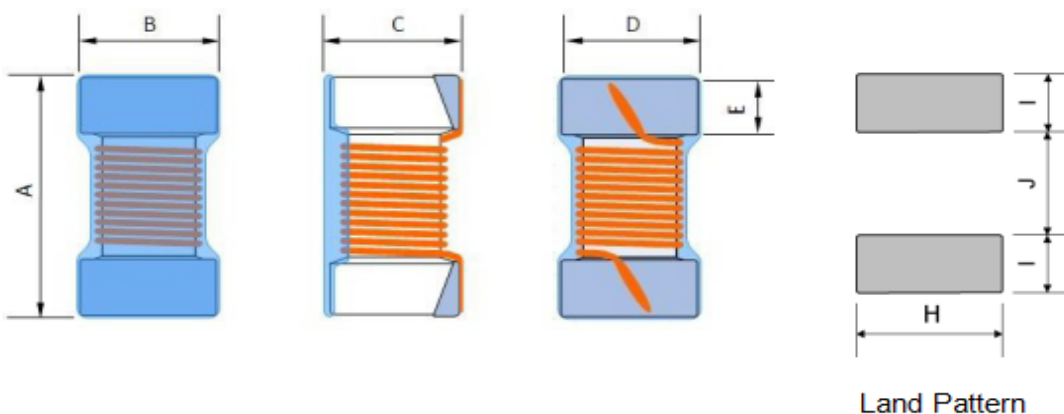
1. Mobile phone TD-LTE/5G communication.
移动电话，TD-LTE，5G通讯.
2. High frequency circuit in communication equipments.
高频线路的通讯设备.
3. Bluetooth，W-LAN，Broadband network.
蓝牙，无线宽带网络.

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)



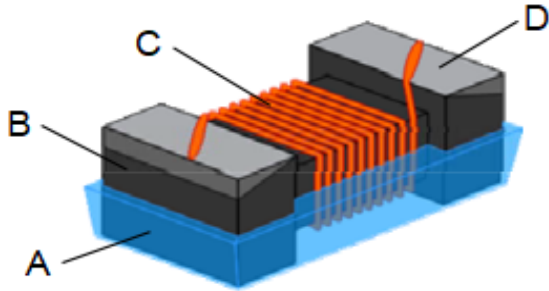
Land Pattern

TYPE(型号)	A	B	C	D	E	H	I	J
HLTGP0805	2.29 Max	1.73 Max	1.55 Max	1.27 Typ	0.5 Typ	1.78 ref	1.02 ref	0.76 ref



Product title	Size (LxWxH)	Inductance	Rated current
HLTGP0805	2.29mm Max/1.73mm Max/1.55mm Max	470nH~68uH	720~40mA

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)

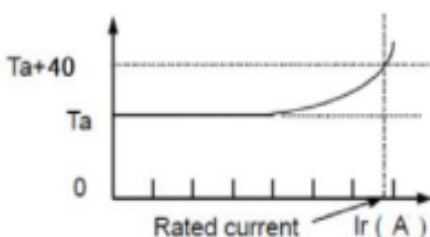
Test equipment: Keysight E4991B / Agilent 16197A or equivalent

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

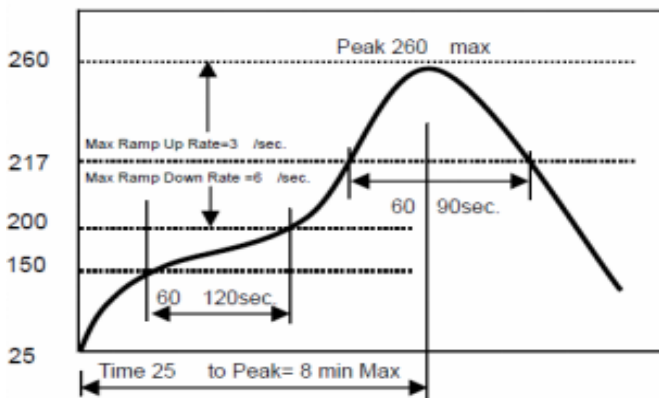
Re-flowing Profile

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:

HLTGP0805 Series

Part Number	Inductance	Tolerance	Min. Quality Factor	L/Q Test Freq.	Max. DC Resistance	Max. Rated Current	Self-resonant Frequency
Symbol	L		Q	Freq.	DCR	I _{rms}	SRF (Min)
Units				MHz	Ω	mA	MHz
HLTGP0805-470nH/□	470nH	J,K,M	10	25	0.72	720	500
HLTGP0805-560nH/□	560nH	J,K,M	10	25	0.60	500	450
HLTGP0805-1uH/□	1uH	J,K,M	10	7.9	1.00	450	400
HLTGP0805-1.5uH/□	1.5uH	J,K,M	10	7.9	1.20	400	300
HLTGP0805-2.2uH/□	2.2uH	J,K,M	12	7.9	1.50	350	170
HLTGP0805-3.3uH/□	3.3uH	J,K,M	15	7.9	1.80	300	90



HLTGP0805-3.9uH/□	3.9uH	J,K,M	10	7.9	1.95	280	90
HLTGP0805-4.7uH/□	4.7uH	J,K,M	12	7.9	2.05	250	85
HLTGP0805-6.8uH/□	6.8uH	J,K,M	12	7.9	2.60	230	55
HLTGP0805-10uH/□	10uH	J,K,M	8	2.5	3.20	150	30
HLTGP0805-15uH/□	15uH	J,K,M	10	2.5	4.20	100	16
HLTGP0805-22uH/□	22uH	J,K,M	8	2.5	6.00	80	14
HLTGP0805-33uH/□	33uH	J,K,M	8	2.5	10.70	60	14
HLTGP0805-47uH/□	47uH	J,K,M	8	2.5	13.80	55	14
HLTGP0805-68uH/□	68uH	J,K,M	8	2.5	17.50	40	11

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