



HLTGP1008

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

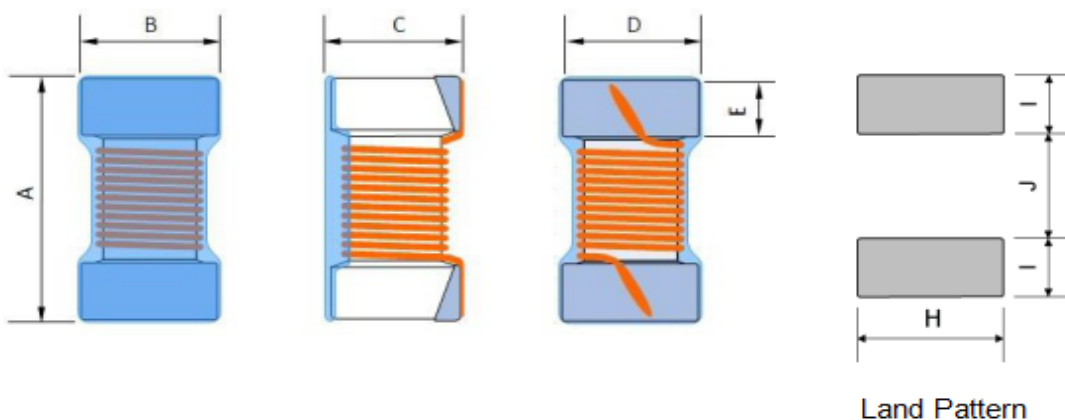
1. Mobile phone TD-LTE/5G communication.
移动电话，TD-LTE，5G通讯.
2. High frequency circuit in communication equipments.
高频线路的通讯设备.
3. Bluetooth，W-LAN，Broadband network.
蓝牙，无线宽带网络.

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
HLTGP1008	2.92 Max	2.79 Max	2.29 Max	2.1 Typ	0.5 Typ	2.54 ref	1.02 ref	1.27 ref



Product title	Size (LxWxH)	Inductance	Rated current
HLTGP1008	2.92mm Max/2.79mm Max/2.29mm Max	1~10uH	600~300mA

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)

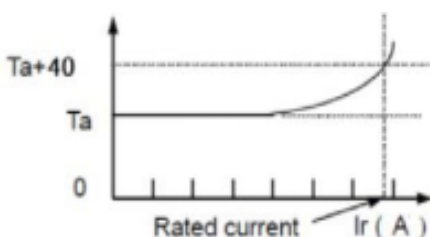
Test equipment: Keysight E4991B / Agilent 16197A or equivalent

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

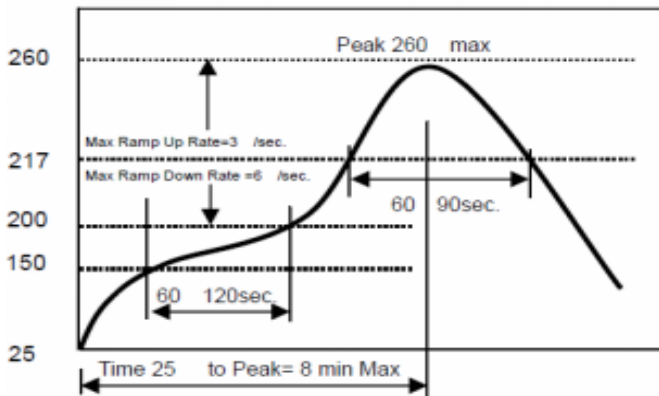
Re-flowing Profile

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:

HLTGP1008 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
HLTGP1008-1uH/□	1uH	J,K,M	20	7.9/50	0.80	600	250
HLTGP1008-1.2uH/□	1.2uH	J,K,M	37	7.9/50	0.80	650	250
HLTGP1008-1.5uH/□	1.5uH	J,K,M	35	7.9/50	0.76	630	190
HLTGP1008-1.8uH/□	1.8uH	J,K,M	33	7.9/50	0.84	600	170
HLTGP1008-2.2uH/□	2.2uH	J,K,M	30	7.9/50	1.15	520	150
HLTGP1008-2.7uH/□	2.7uH	J,K,M	25	7.9/50	1.30	490	120



HLTGP1008-3.3uH/□	3.3uH	J,K,M	23	7.9/50	1.70	450	100
HLTGP1008-3.9uH/□	3.9uH	J,K,M	26	7.9/25	2.00	420	100
HLTGP1008-4.7uH/□	4.7uH	J,K,M	31	7.9	1.68	400	60
HLTGP1008-5.6uH/□	5.6uH	J,K,M	23	7.9	2.65	380	80
HLTGP1008-6.8uH/□	6.8uH	J,K,M	20	7.9	3.00	360	60
HLTGP1008-8.2uH/□	8.2uH	J,K,M	20	7.9	3.30	330	40
HLTGP1008-10uH/□	10uH	J,K,M	15	7.9	2.95	300	40

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