Common Mode Choke

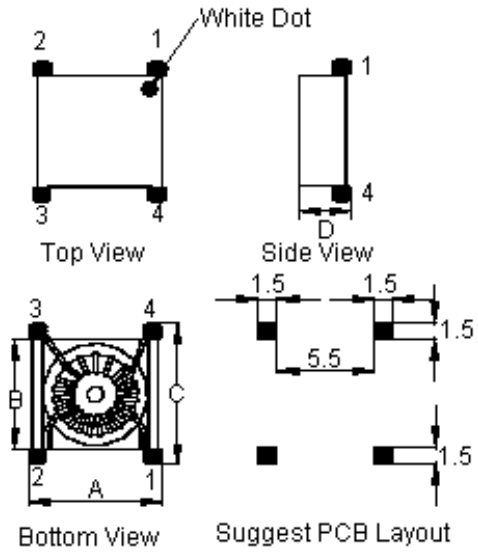
RoHS Compliant

Electrical Characteristics (at 25°C)

1kHz 0.25V	L_{1-4}	80μH +50% -35%
	L_{2-3}	
	L_{1-4}-L_{2-3}	3μH (Max.)
at 25°C	DCR_{1-4}	60mΩ (Max.)
	DCR_{2-3}	
100MHz	Z	1.34KΩ (Typical)
Coil-Coil DC 1,000 2mA	Hi-pot	3S (Min.)

Operating temperature: -20°C to +85°C

Configurations and Dimensions



A	8.3 ±0.5mm
B	7 ±0.5mm
C	10 ±0.5mm
D	5 ±0.5mm

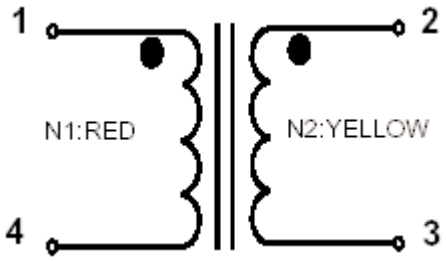
Dimensions : Millimetres

Test Data for Mechanical

Test Item	A mm	B mm	C mm	D mm
Specification	8.3 ±0.5	7 ±0.5	10 ±0.5	5 ±0.5
1	8.24	7.03	10.03	4.99
2	8.2	7	10.02	5.02
3	8.25	7.04	10.03	5.03
4	8.23	7.01	10.04	5.04
5	8.2	7	10.01	5.05
Average	8.22	7.02	10.03	5.03

Common Mode Choke

Schematic Diagram



Note:

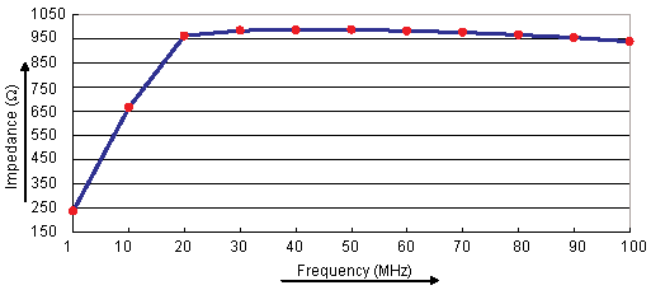
1-4.Wire Ø0.25mm × 1P 2UEWF 155°C × 12TS (Reference)

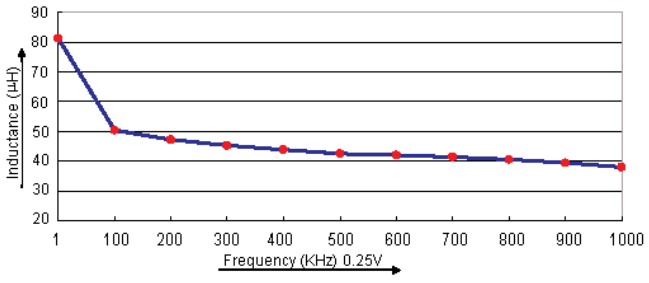
2-3.Wire Ø0.25mm × 1P 2UEWF 155°C × 12TS (Reference)

Test Data for Electrical

Test Item	L_{1-4} μH	L_{2-3} μH	$L_{1-4-L2-3}$ μH	DCR_{1-4} mΩ	DCR_{2-3} mΩ	Z Ω	Hi-pot S
Condition	**1KHz 0.25V**	**1KHz 0.25V**	**1KHz 0.25V**	**at 25°C**	**at 25°C**	**100MHz**	**Coil-Coil DC 1,000 2mA**
Specification	80 +50% -35%	80 +50% -35%	3 (Max.)	60 (Max.)	60 (Max.)	1.34 (Typical)	3 (Min.)
1	88.7	88.6	0.1	47.51	46.47	1.036	OK
2	86.4	86.3		46.89	46.48	1.084	OK
3	86.7	86.6		47.35	46.96	0.862	OK
4	87.7	87.7	0	46.73	46.92	0.863	OK
5	92.4	92.3	0.1	47.1	46.78	0.812	OK
Average	88.38	88.3	0.08	47.12	46.72	0.93	OK

Electric Characteristics





Reliability Test

Test Item	Specifications	Test Method and Remarks
Operating temperature range	-20°C to +85°C	Including temperature rise due to self-generated heat
Storage condition	Ambient temperature : 0°C to 40°C Humidity : Below 70%RH	To maintain the solderability of terminal electrodes, care must be taken to control temperature and humidity in the storage area.
Moisture sensitivity	Appearance : No abnormality No damage DCR change : Within ±20% Inductance change : Within ±20%	According to J-STD-020B level 3 Test condition : 60°C 60% RH Test duration : 40 hours Recovery : 1 to 2 hours of recovery under the standard condition after the removal from the test chamber.
Solderability	All termination shall exhibit a continuous solder coating free from defects for a minimum of 90% of the surface area of any individual lead.	According to J-STD-002B Steam aging category : 97°C 98% RH Steam aging duration : 8 hours Solder : Lead-free solder Solder temperature : 260 ±5°C Dip time : 5 +0/-0.5 seconds.

Material List

No.	Item	Material Description
1	Core	S2K T4.3 × 2.5 × 2.8
2	Wire	Ø0.3mm × 2P 2UEWF 155°C
3	Solder (Lead Free)	Sn99.3%Cu0.7%
4	Base	BG406-1 LCP4008

Part Number Table

Description	Part Number
Choke, common mode, 80µH, 60mΩ	MCBS3019P-800U