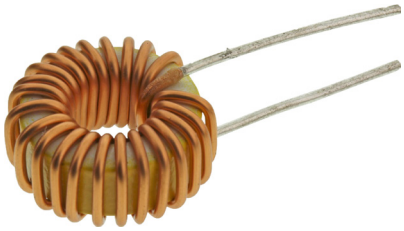
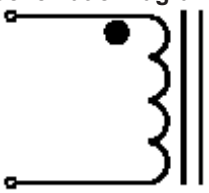
Inductor

multicomp PRO

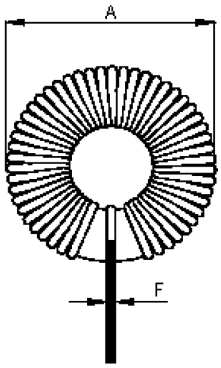
RoHS Compliant



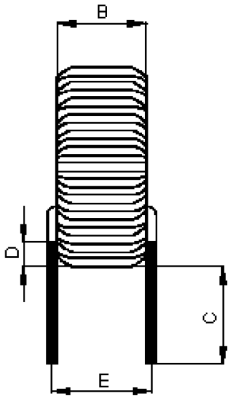
Schematic Diagram



Configurations and Dimensions



Front View



Side View

A	12mm (Max.)
B	5.5mm (Max.)
C	15 ±2mm
D	1mm (Min.)
E	4.5 ±2mm
F	Ø0.4mm (Ref.)

Note:
1. Wire UEFN/U (155°C) Ø0.4mm
2. 50TS (Reference) C.W

Test Data for Mechanical

Test Item	A mm	B mm	C mm	D mm	E mm	F mm
Specification	**12 (Max.)**	**5.5 (Max.)**	**15 ±2**	**1 (Min.)**	**4.5 ±2**	**Ø0.4 (Ref.)**
1	10.6	4.68	14.78	1.38	4.42	0.38
2	10.61	4.67	15.23	1.32	4.31	0.39
3	10.64	4.63	14.79	1.41	4.33	
4	10.69	4.62	15.03	1.33	4.36	
5	10.67	4.61	14.98	1.32	4.37	0.37
Average	**10.64**	**4.64**	**14.96**	**1.35**	**4.36**	**0.38**

Electrical Characteristics

Test Condition		
10kHz / 5mA	L	68µH ±20%
T_A = 25°C	DCR	100mΩ (Max.)
10kHz / 5mA Irms = 0.8A	ΔT	Temperature rise 40°C (Max.)

Operating temperature : -55°C to +130°C

Reliability Test

Test Item	Specifications	Test Method and Remarks
Operating temperature range	-55°C to +130°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 ±5% Inductance change : Within ±5%	According to J-STD-020B level 3 Test condition : 60°C 60% RH Test duration : 40 hrs 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 95% of the surface area of any individual lead.	According to J-STD-002B Steam aging category : 97°C 98% RH Steam aging duration : 8 hrs Solder : Lead-free solder Solder temperature : 260 ±5°C Dip time : 5 +0 / -0.5s

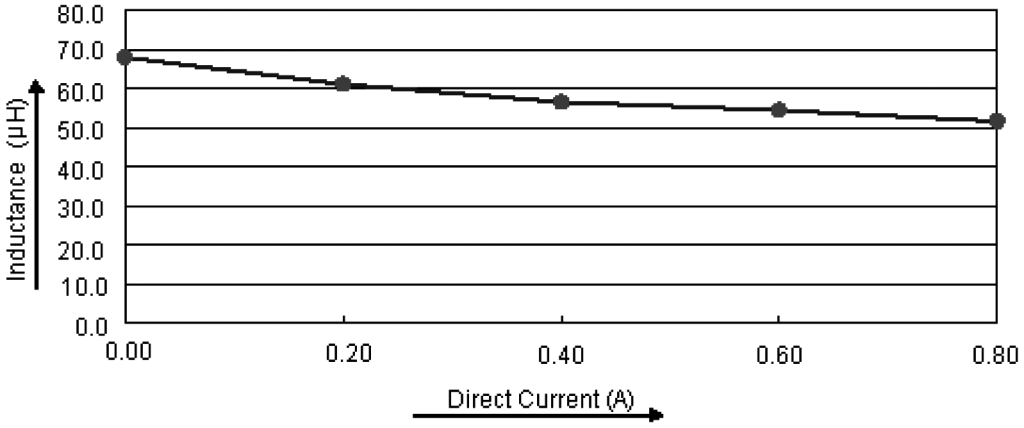
Material List

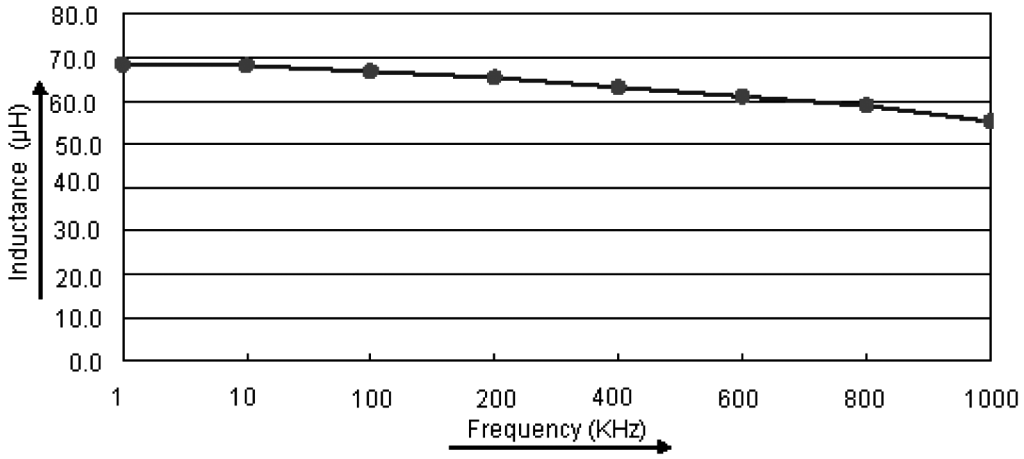
No.	Item	Material Description
1	Core	T37-75-TAF200 (Red / White)
2	Wire	Ø0.4 mm UEFN/U (155°C)
3	Solder (Lead-free)	Sn99.3% / Cu0.7%

Test Data for Electrical

Test Item	L µH	DCR mΩ	ΔT
Condition	10kHz / 5mA	T_A = 25°C	10kHz / 5mA Irms = 0.8A
Specification	68 ±20%	100 (Max.)	Temperature rise 40°C (Max.)
1	67.23	90.34	OK
2	67.38	91.25	
3	68.37	90.47	
4	67.79	90.68	
5	67.58	90.69	
Average	**67.67**	**90.69**	**OK**

Electric Characteristics





Part Number Table

Description	Part Number
Inductor, 68µH, 20%, 2 Pin	MCAP103726044A-680MU