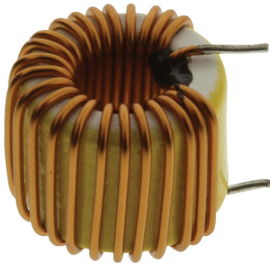
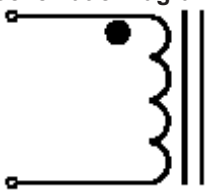
Inductor

multicomp PRO

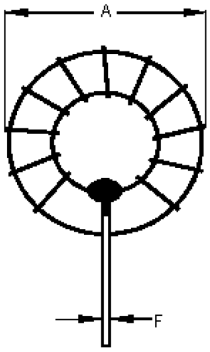


RoHS Compliant

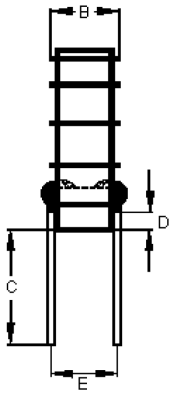
Schematic Diagram



Configurations and Dimensions



Front View



Side View

A	16mm (Max.)
B	12mm (Max.)
C	$2.2mm^{+0.7}_{-0.0}$
D	1mm (Min.)
E	11 ±2mm
F	Ø0.65mm (Ref.)

Note:
1. Wire UEFN/U (155°C) Ø0.65mm
2. 25TS (Reference) C.W

Test Data for Mechanical

Test Item	A mm	B mm	C mm	D mm	E mm	F mm
Specification	**16 (Max.)**	**12 (Max.)**	**2.2**	**1 (Min.)**	**11 ±2**	**Ø0.65 (Ref.)**
1	15.18	11.2	2.57	1.58	11.07	0.63
2	15.22	11.18	2.65	1.69	11.23	
3	15.17	11.15	2.78	1.75	10.89	0.64
4	15.25	11.24	2.64	1.65	10.95	
5	15.21	11.17	2.56	1.85	11.14	0.63
Average	**15.21**	**11.19**	**2.64**	**1.7**	**11.06**	**0.63**

Electrical Characteristics

Test Condition		
10kHz / 0.25V	L	40μH ±20%
T_A = 25°C	DCR	60mΩ (Max.)
1kHz / 0.25V Irms = 2A	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

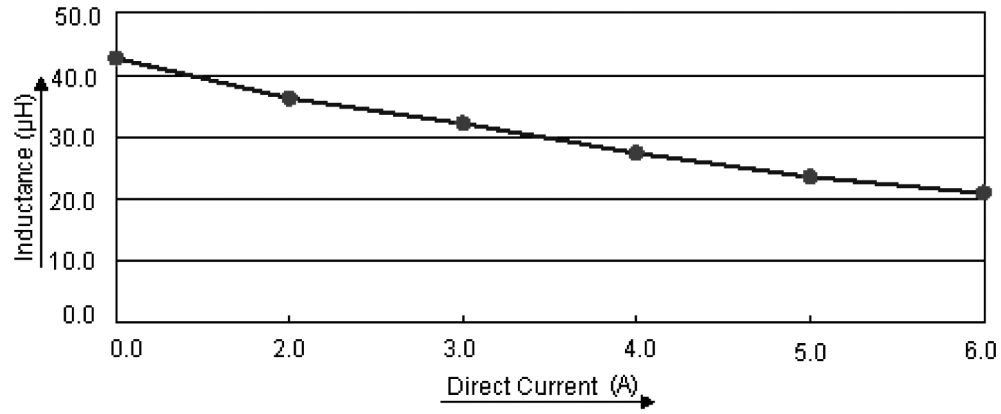
Material List

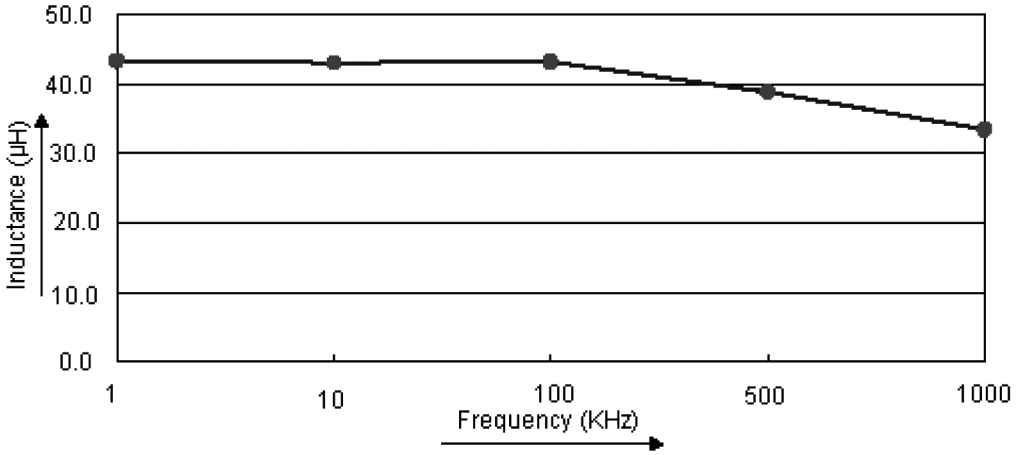
No.	Item	Material Description
1	Core	T50D-75-TAF200 (Red / White)
2	Wire	Ø0.65mm UEFN/U (155°C)
3	Solder (Lead-free)	Sn99.3% / Cu0.7%
4	Glue	TH100A / TH100B

Test Data for Electrical

Test Item	L µH	DCR mΩ	ΔT
Condition	1kHz / 25V	T_A = 25°C	1kHz / 0.25V Irms = 2A
Specification	40 ±20%	60 (Max.)	Temperature rise 40°C (Max.)
1	43.93	37.53	OK
2	42.77	36.89	
3	44.31	37.48	
4	42.71	37.06	
5	43.37	37.18	
Average	**43.42**	**37.23**	**OK**

Electric Characteristics





Part Number Table

Description	Part Number
Inductor, 40µH, 20%, 2 Pins	MCAP105422025A-400MU