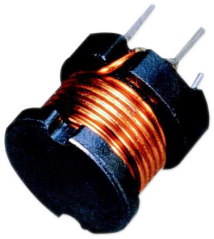
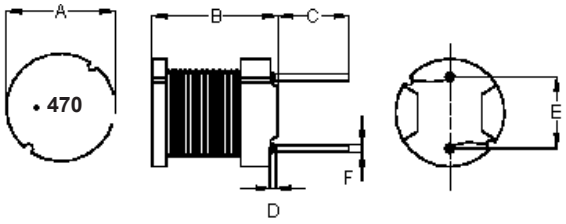
Inductor
Radial Leaded

multicomp PRO

RoHS Compliant



Configurations and Dimensions

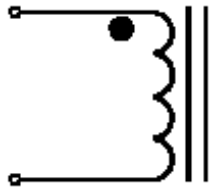


Top View Front View Bottom View

A	7.8mm ±0.5mm
B	9.5mm ±0.5mm
C	5mm ±1mm
D	3mm (Max.)
E	5mm ±0.5mm
F	Ø0.6mm (Ref.)

Note : The dot of marking indicates the start terminal of winding

Schematic Diagram



Note:
1. Wire UEFN/U (155°C) Ø0.4mm
2. 38.5TS (Reference) C.W

Test Data for Mechanical

Test Item	A mm	B mm	C mm	D mm	E mm	F mm
Specification	7.8 ±0.5	9.5 ±0.5	5 ±1	3 (Max.)	5 ±0.5	Ø0.6 (Ref.)
1	7.81	9.49	5.16	1.33	4.99	0.69
2	7.80	9.43	5.18	1.38	5.12	0.71
3	7.84	9.45	5.43	1.36	4.90	0.69
4	7.80	9.44	5.15	1.45	5.14	0.7
5	7.83	9.58	5.24	1.47	5.14	0.7
Average	**7.82**	**9.48**	**5.23**	**1.4**	**5.06**	**0.7**

Electrical Characteristics

Test Condition		
1kHz 0.25V	L	47μH ±20%
T_A = 25°C	DCR	120mΩ (Max.)
1kHz 0.25 V Irms = 1.3A	ΔT	Temperature rise 40°C (Max.)

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

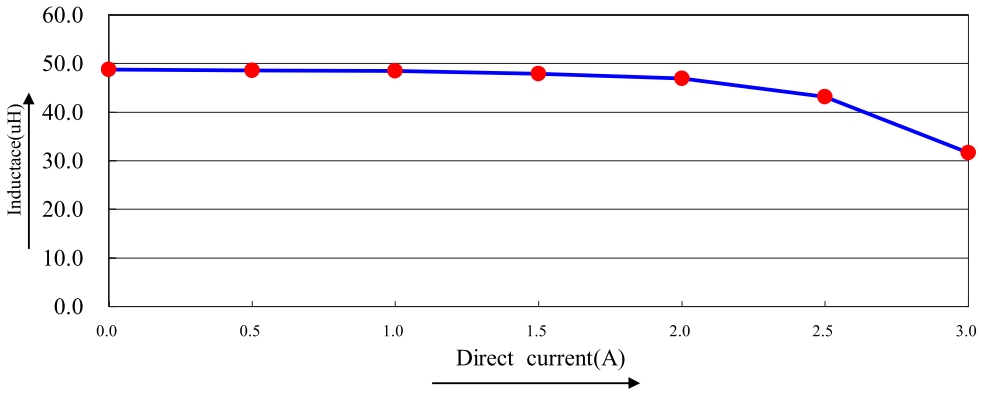
Material List

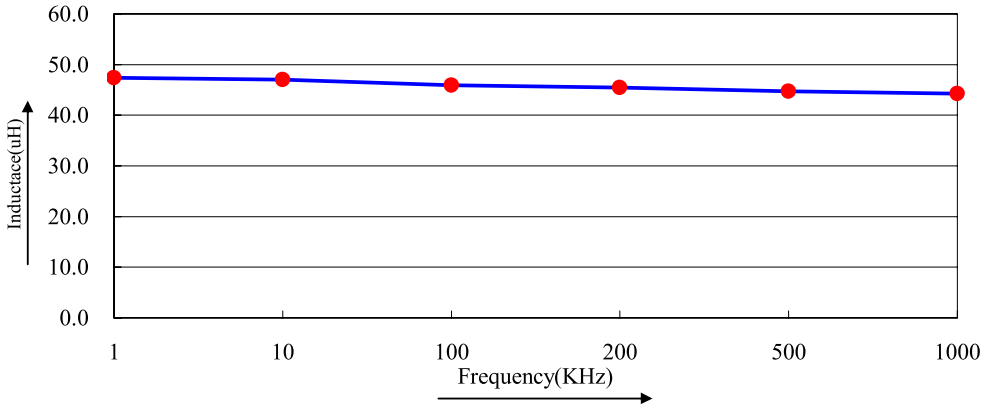
No.	Item	Material Description
1	Core	F6D DR2W7.8*9.5(SW)RCH B3.75 F5.6 P5
2	Wire	Ø0.4mm UEFN/U (155°C)
3	Solder (Lead-free)	Sn99.3% / Cu0.7%

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

Electric Characteristics





Test Data for Electrical

Test Item	L µH	DCR Ω	ΔT
Condition	1kHz 0.25V	at 25°C	1kHz 0.25V Irms = 1.3A
Specification	47 ±20%	120 (Max.)	Temperature rise 40°C (Max.)
1	49.46	98.56	OK
2	49.52	99.26	
3	49.24	99.21	
4	49.16	98.87	
5	49.30	98.88	
Average	**49.34**	**98.96**	**OK**

Part Number Table

Description	Part Number
Inductor, 47µH, 1.3A, 120mΩ DCR	MCSCH895-470KU