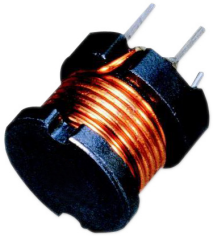
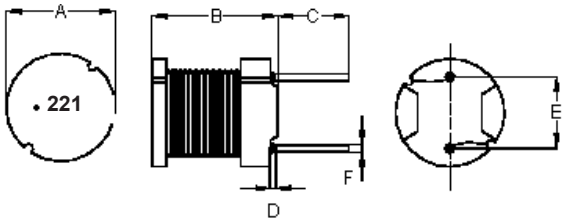
Inductor
Radial Leaded

multicomp PRO

RoHS Compliant



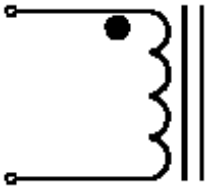
Configurations and Dimensions



Top View **Front View** **Bottom View**

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

Schematic Diagram



Note:
1. Wire UEFN/U (155°C) Ø0.3mm
2. 83.5TS (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	Ø0.7 (Ref.)
1	7.8	9.49	5.17	1.38	4.99	0.69
2	7.81	9.47	5.18	1.27	5.1	0.68
3	7.82	9.45	5.12	1.38	4.92	0.7
4	7.8	9.47	5.11	1.44	5.11	0.69
5	7.81	9.48	5.34	1.25		0.68
Average	**7.81**	**9.47**	**5.18**	**1.34**	**5.05**	**0.69**

Electrical Characteristics

Test Condition		
1kHz 0.25V	L	220μH ±10%
T_A = 25°C	DCR	480mΩ (Max)
1kHz 0.25 V Irms = 0.64A	ΔT	Temperature rise 40°C (Max.)

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

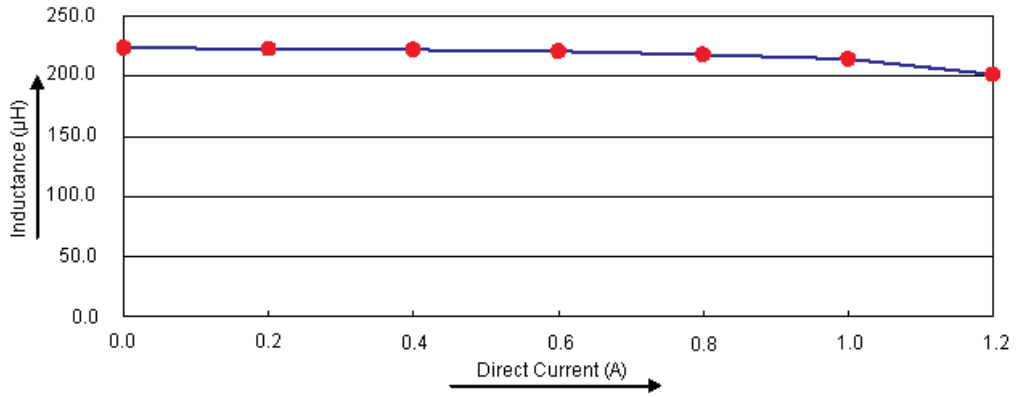
Material List

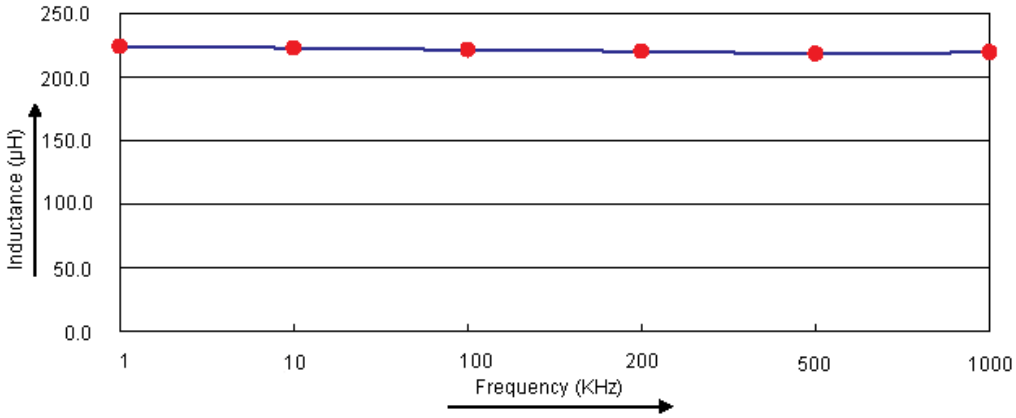
No.	Item	Material Description
1	Core	F6D DR2W7.8 × 9.5 (SW) RCH B3.6 F5.4 P5
2	Wire	Ø0.3mm UEFN/U (155°C)
3	Solder (Lead-free)	Sn99.3% / Cu0.7%

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 = 0.64A
Specification	220 ±10%	480 (Max.)	Temperature rise 40°C (Max.)
1	219.78	420.3	OK
2	219.15	419.8	
3	218.64	417.5	
4	218.26	418.9	
5	219.26	418.5	
Average	**219.02**	**419**	**OK**

Part Number Table

Description	Part Number
Inductor, 220µH, 10%, Radial Leaded	MCSCH895-221KU