



PART NO.

MCSCH664-6R8KU

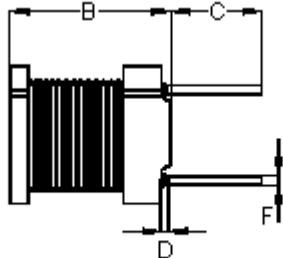
REVISIONS

ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	SID	20/4/11	SHA	20/4/11		04/5/11

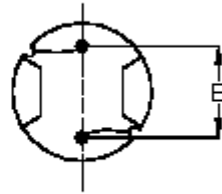
Configurations and Dimensions



Top View



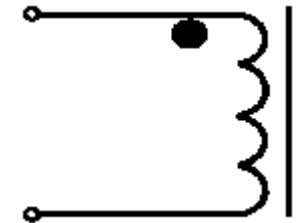
Front View



Bottom View

A	6 ±0.5 mm	-
B	6.5 mm	(Max.)
C	4 ±1 mm	-
D	2 mm	(Max.)
E	4 ±0.5 mm	-
F	Ø0.5 mm	(Ref.)

Schematic Diagram



Note:

1. Wire UEFN/U (155°C) Ø0.4mm
2. 15.5TS (Reference) C.W



Electrical Characteristics

Test Condition		
1 MHz 0.25 V	L	6.8 µH ±10%
T _a = 25°C	DCR	35 mΩ (Max.)
1 MHz 0.25 V I _{rms} = 2.8 A	ΔT	Temperature rise 40°C (Max.)

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

Test Data for Mechanical

Test Item	A mm	B mm	C mm	D mm	E mm	F mm
Specification	6 ±0.5	6.5 (Max.)	4 ±1	2 (Max.)	4 ±0.5	Ø0.5 (Ref.)
1	6.03	6.37	4.25	0.68	4.14	0.54
2	6.05	6.38	4.01	0.78	4.09	
3	6.02	6.35	4.12	0.69	4.01	0.53
4	6.07	6.41	4.07	0.72	4.07	0.55
5	6.05	6.38	3.94	0.73	3.94	0.54
Average	6.04	6.38	4.08	0.72	4.05	0.54

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SID

DATE:

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DATE:

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DATE:

04/05/11

DRAWING TITLE:

Inductor - Radial Leaded

SIZE
A

DWG NO.

M10002632

ELECTRONIC FILE
MCSCHE664-6R8KUREV
A

SCALE: NTS

U.O.M.: mm

SHEET: 1 OF 3



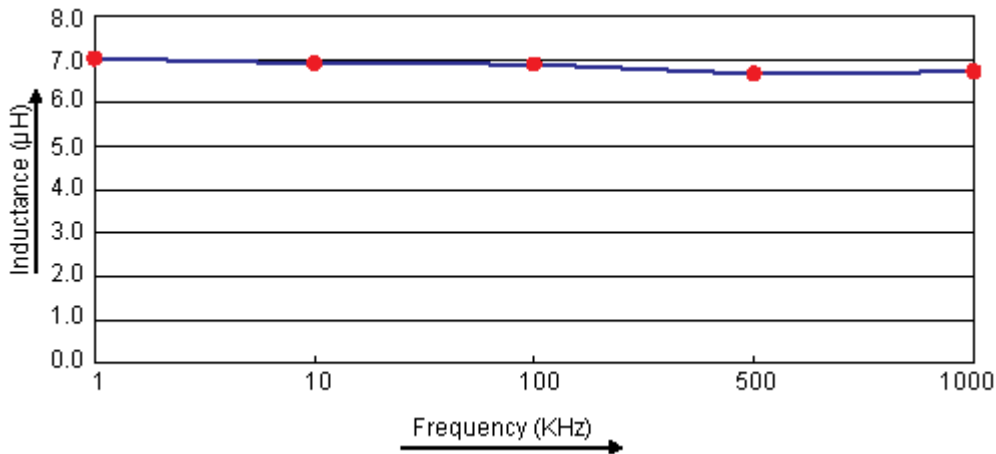
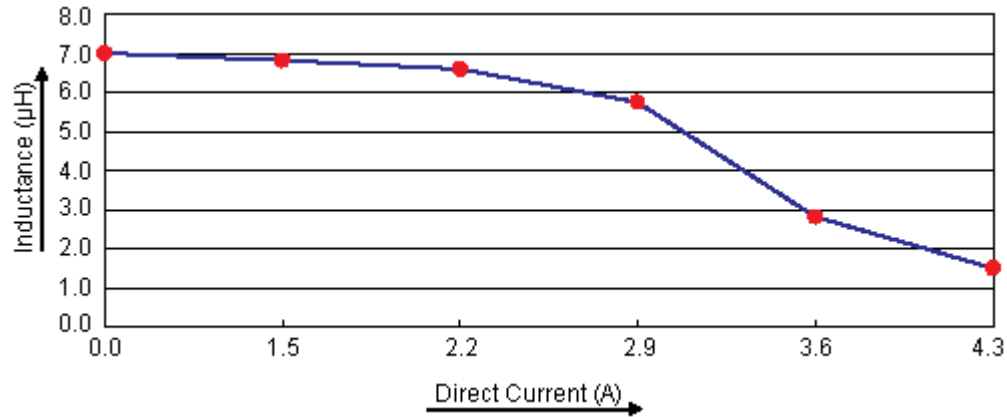
PART NO.

MC SCH664-6R8KU

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Electric Characteristics



Test Data for Electrical

Test Item	L μH	DCR mΩ	ΔT
Condition	1 KHz 0.25 V	at 25°C	1 KHz 0.25 V I _{rms} = 2.8 A
Specification	6.8 ±10%	35 (Max.)	Temperature rise 40°C (Max.)
1	6.85	26.64	OK
2	6.8	27.05	
3	6.89	26.86	
4	6.85	26.8	
5	6.81	26.73	
Average	6.84	26.82	OK

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Inductor - Radial Leaded

SIZE
A

DWG NO.

M10002632

ELECTRONIC FILE
MC SCH664-6R8KUREV
A

SCALE: NTS

U.O.M.: mm

SHEET: 2 OF 3



PART NO.

MC SCH664-6R8KU

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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 / -0.5 s

Material List

No.	Item	Material Description
1	Core	M4S DRWW6 × 6.3 D31M
2	Wire	Ø0.4 mm UEFN/U (155°C)
3	Solder (Lead-free)	Sn99.3% / Cu0.7%

Part Number Table

Description	Part Number
Inductor, 6.8µH, 10%, Radial Leaded	MC SCH664-6R8KU

<http://www.element14.com><http://www.farnell.com><http://www.newark.com>

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SHEET: 3 OF 3