



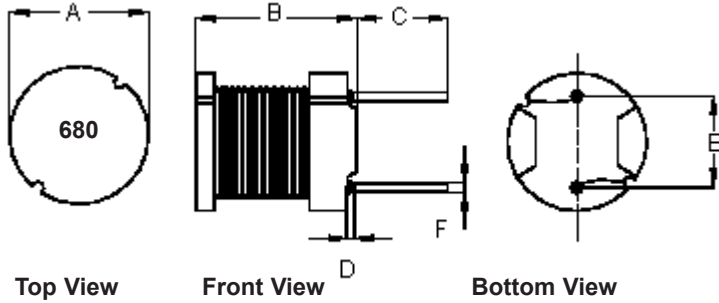
PART NO.

MCSCH664-680KU

REVISIONS

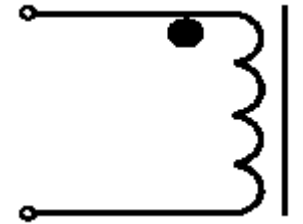
ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	SID	20/4/11	SHA	20/4/11		04/5/11

Configurations and Dimensions



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 : White dot of marking indicates the start terminal of winding

Note:

1. Wire UEFN/U (155°C) Ø0.25mm
2. 50.5TS (Reference) C.W

Electrical Characteristics

Test Condition		
1 KHz 0.25 V	L	68 µH ±10%
T _a = 25°C	DCR	280 mΩ (Max.)
1 KHz 0.25 V I _{rms} = 1.4 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	5.96	6.36	4.22	0.68	3.86	0.5
2		6.35	4.03	0.62	3.9	
3	5.98	6.37	4.19	0.69	4.02	0.52
4	5.96	6.35	4.12	0.63	3.91	0.5
5	5.97	6.33	4.21	0.66	3.92	0.51
Average	5.97	6.35	4.15	0.66	3.92	0.51

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SID

CHECKED BY:

SHA

APPROVED BY:

DATE:

20/04/11

DATE:

20/04/11

DATE:

04/05/11

DRAWING TITLE:

Inductor - Radial Leaded

SIZE
A

DWG NO.

M10002634

ELECTRONIC FILE
MCSCH664-680KU

REV
A

SCALE: NTS

U.O.M.: mm

SHEET: 1 OF 3



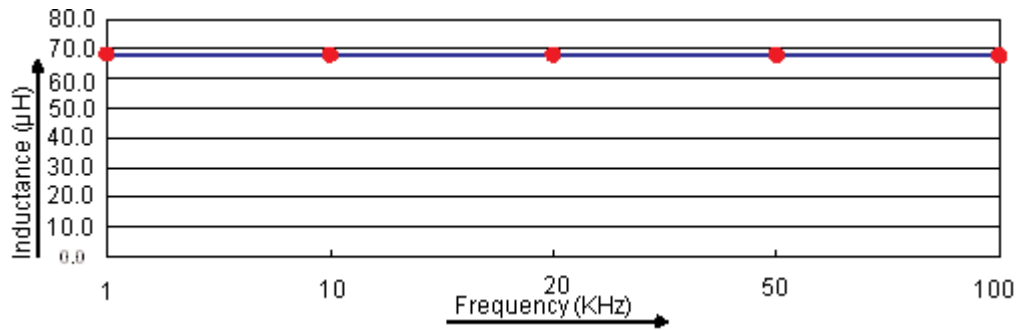
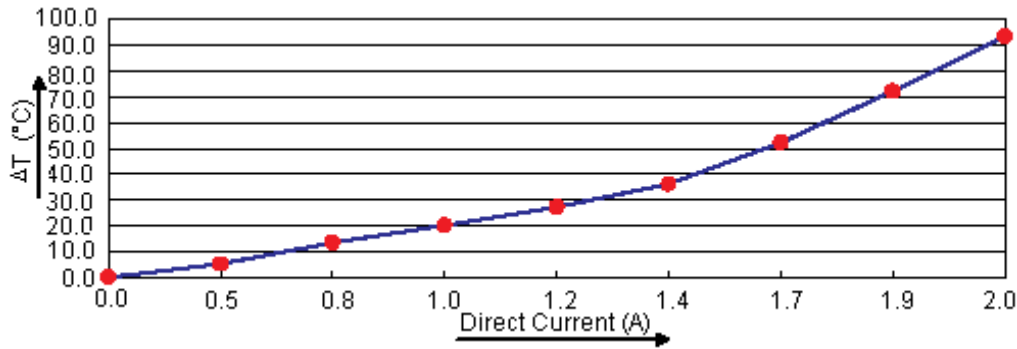
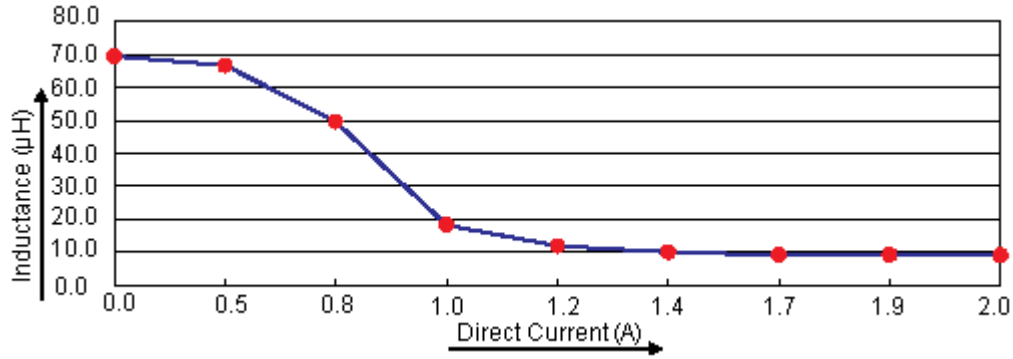
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Electric Characteristics



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} = 1.4 A
Specification	68 ±10%	280 (Max.)	Temperature rise 40°C (Max.)
1	68.7	222	OK
2	68.45	223.1	
3	68.6	223.6	
4	68.75	221	
5	68.05	222.6	
Average	68.51	222.46	OK

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APPROVED BY:	DATE:
	04/05/11

DRAWING TITLE:

Inductor - Radial Leaded

SIZE A	DWG NO. M10002634	ELECTRONIC FILE MCSCH664-680KU	REV A
SCALE: NTS		U.O.M.: mm	SHEET: 2 OF 3



PART NO.

MCSCH664-680KU

REVISIONS

ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
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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	F4D DR2W6.2 × 6.3 (SW) RCH
2	Wire	Ø0.25 mm UEFN/U (155°C)
3	Solder (Lead-free)	Sn99.3% / Cu0.7%

Part Number Table

Description	Part Number
Inductor, 68µH, 10%, Radial Leaded	MCSCH664-680KU

<http://www.element14.com>

<http://www.farnell.com>

<http://www.newark.com>

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ELECTRONIC FILE
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REV
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SHEET: 3 OF 3