



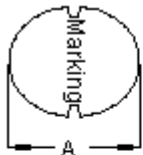
PART NO.

MCSDC0805-100MU

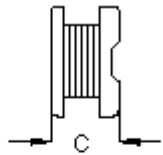
REVISIONS

ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	Shambu	10/2/11	Jagan	10/2/11	Farnell	24/2/11

Configurations and Dimensions



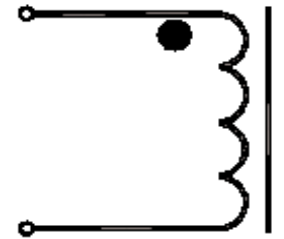
Top View



Side View

A	7.8 mm	(Maximum)
C	5.3 mm	(Maximum)
D	2.6 mm	(Reference)

Schematic Diagram



Note:

1. Wire Ø0.35mm x 1P 2UEWF155°C
2. 16.5TS (Reference)

Test Data for Mechanical

Test Item	A mm	C mm	D mm
Specification	7.8 (Maximum)	5.3 (Maximum)	2.6 (Reference)
1	7.48	5.08	2.5
2	7.51	5.03	2.48
3	7.49	5.05	2.43
4	7.5	5.04	2.52
5	7.49	5.05	2.41
Average	7.49	5.05	2.47

Marking: 100

Electrical Characteristics (at 25°C)

Test Condition		
1KHz 1V	L	10μH ±20%
at 25°C	DCR	70mΩ (Maximum)
1KHz 1V I _{sat} = 3.2A	L at I _{sat}	L drops 35% (Maximum)
1KHz 1V I _{rms} = 2.3A	ΔT	Temperature Rise 40°C (Maximum)

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

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DRAWN BY:

Shambu

DATE:

10/02/11

CHECKED BY:

Jagan

DATE:

10/02/11

APPROVED BY:

Farnell

DATE:

24/02/11

DRAWING TITLE:

Inductor

SIZE
A

DWG NO.

M10003219

ELECTRONIC FILE
SDC0805-100MUREV
A

SCALE: NTS

U.O.M.: mm

SHEET: 1 OF 3



PART NO.

MCSDC0805-100MU

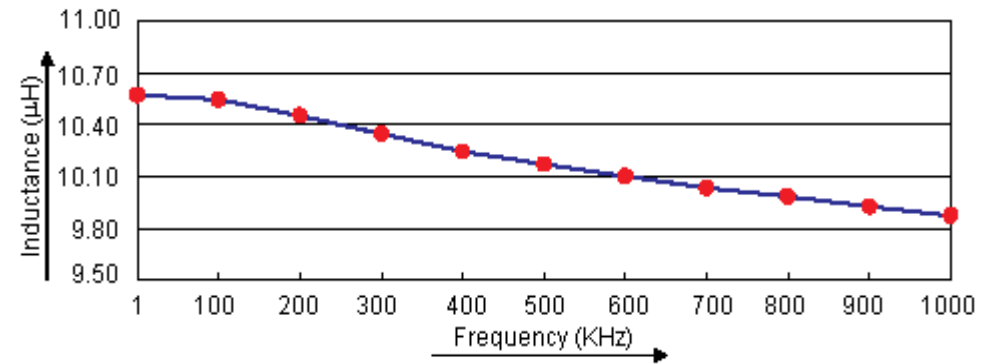
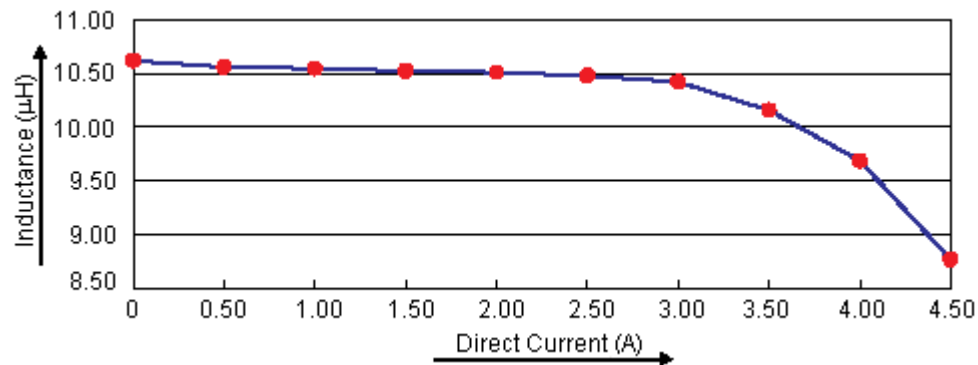
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Test Data for Electrical

Test Item	L μH	DCR $\text{m}\Omega$	L at I_{sat} μH	ΔT
Condition	1KHz 1V	at 25°C	1KHz 1V $I_{\text{sat}} = 3.2\text{A}$	1KHz 1V $I_{\text{rms}} = 2.3\text{A}$
Specification	10 $\pm 20\%$	70 (Maximum)	L drops 35% (Maximum)	Temperature Rise 40°C (Maximum)
1	10.61	47.61	10.1	OK
2	10.49	49.36	10.16	OK
3	10.44	48.25	10.11	OK
4	10.58	49.2	10.13	OK
5	10.36	48.33	9.87	OK
Average	10.5	48.55	10.07	OK

Electric Characteristics



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DWG NO.

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ELECTRONIC FILE

SDC0805-100MU

REV

A

SCALE: NTS

U.O.M.: mm

SHEET: 2 OF 3



PART NO.

MCSDC0805-100MU

REVISIONS

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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 ±20% Inductance change : Within ±20%	According to J-STD-020B level 3 Test condition : 60°C 60% RH Test duration : 40 hours 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 90% of the surface area of any individual lead.	According to J-STD-002B Steam aging category : 97°C 98% RH Steam aging duration : 8 hours Solder : Lead-free solder Solder temperature : 260 ±5°C Dip time : 5 +0/-0.5 seconds.

Material List

No.	Item	Material Description
1	Core	R5A CDR7.5 x 5 (ST) B3.4 F2.5
2	Wire	Ø0.35mm x 1P 2UEWF 155°C
3	Solder (Lead Free)	Sn99.3%/Cu0.7%

Part Number Table

Description	Part Number
Inductors, 10μH, 20%, SMD	MCSDC0805-100MU

<http://www.farnell.com><http://www.newark.com><http://www.cpc.co.uk>

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SHEET: 3 OF 3