



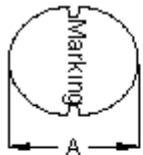
PART NO.

MCSDC0604-100MU

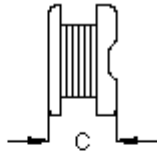
REVISIONS

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

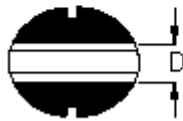


Top View

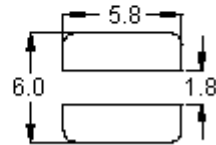


Side View

A	5.8 mm	(Maximum)
C	4.8 mm	(Maximum)
D	1.8 mm	(Reference)

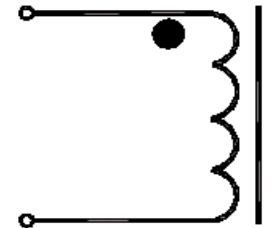


Bottom View



Suggest PCB Layout
Dimensions : Millimetres

Schematic Diagram



Note:

1. Wire Ø0.25mm x 1P 2UEF1/U 155°C
2. 18.5TS (Reference)

Marking : 100

Electrical Characteristics (at 25°C)

Test Condition		
1KHz 1V	L	4.7µH ±20%
at 25°C	DCR	80mΩ (Maximum)
1KHz 1V I _{rms} = 1.45A	ΔT	Temperature rise 40°C (Maximum)

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

Test Data for Mechanical

Test Item	A mm	C mm	D mm
Specification	5.8 (Maximum)	4.8 (Maximum)	1.8 (Reference)
1	5.62	4.61	1.86
2	5.63	4.58	1.91
3	5.59	4.59	1.84
4	5.61	5.62	1.78
5	5.62	4.61	1.82
Average	5.61	4.8	1.84

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Shambu	10/02/11
CHECKED BY:	DATE:
Jagan	10/02/11
APPROVED BY:	DATE:
Farnell	24/02/11

DRAWING TITLE:

Inductor

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10003212	SDC0604-100MU	A
SCALE: NTS	U.O.M.: mm	SHEET: 1 OF 3	



PART NO.

MCSDC0604-100MU

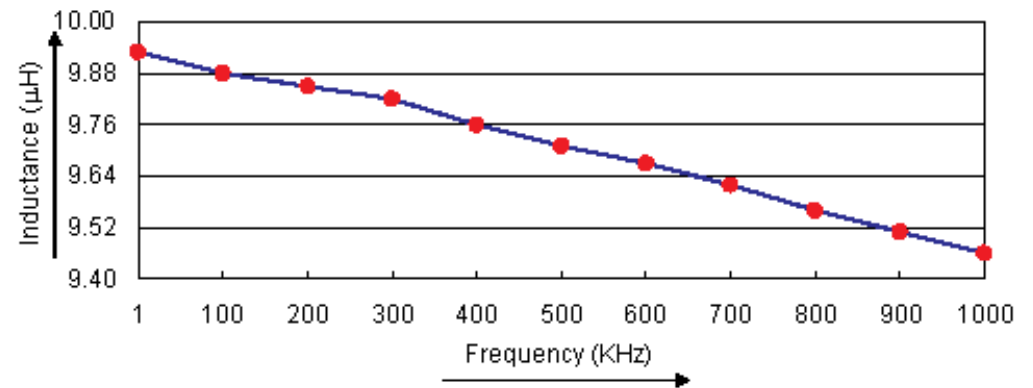
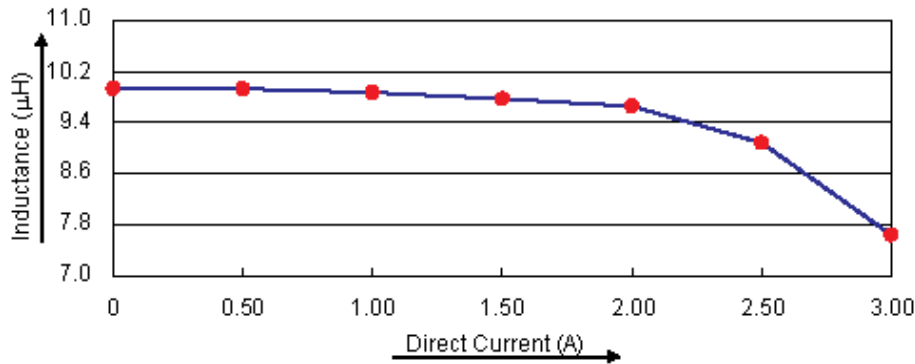
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Test Data for Electrical

Test Item	L μH	DCR mΩ	ΔT
Condition	1KHz 1V	at 25°C	1KHz 1V I _{rms} = 1.45A
Specification	10 ±20%	100 (Maximum)	Temperature rise 40°C (Maximum)
1	9.87	80.54	OK
2	9.94	78.23	OK
3	9.96	78.26	OK
4	9.83	79.82	OK
5	9.91	79.77	OK
Average	9.9	79.32	OK

Electric Characteristics



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Jagan	10/02/11
APPROVED BY:	DATE:
Farnell	24/02/11

DRAWING TITLE:			
Inductor			
SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10003212	SDC0604-100MU	A
SCALE: NTS		U.O.M.: mm	SHEET: 2 OF 3



PART NO.

MCSDC0604-100MU

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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°C ±5°C Dip time : 5 +0/-0.5 seconds.

Material List

No.	Item	Material Description
1	Core	R5A CDR5.6 x 4.55 (ST) B2.4 F2.1
2	Wire	Ø0.25mm x 1P 2UEF1/U (155°C)
3	Solder (Lead Free)	Sn99.3%/Cu0.7%

Part Number Table

Description	Part Number
Inductors, 10µH, 20%, SMD	MCSDC0604-100MU

<http://www.farnell.com>

<http://www.newark.com>

<http://www.cpc.co.uk>

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Inductor			
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A	M10003212	SDC0604-100MU	A
SCALE: NTS	U.O.M.: mm	SHEET: 3 OF 3	