



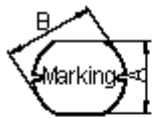
PART NO.

MCSD43-4R7MU

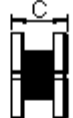
REVISIONS

ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	Ashok	08/2/11	Jagan	08/2/11	Farnell	22/2/11

Configurations and Dimensions

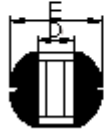


Top View

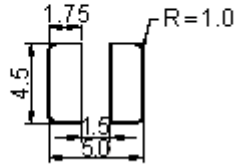


Side View

A	4 ±0.3 mm	-
B	4.5 ±0.3 mm	-
C	3.2 ±0.3 mm	-
D	1 mm	(Reference)
E	4.5 ±0.5 mm	-



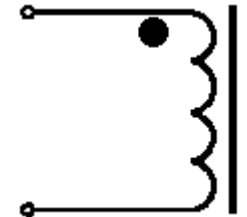
Bottom View



Suggest PCB Layout

Dimensions : Millimetres

Schematic Diagram



Note:

1. Wire Ø0.25mm x 1P 2UEWF 155°C
2. 14.5TS (Reference)

Marking: 4R7

Electrical Characteristics (at 25°C)

Test Condition		
100KHz 0.25V	L	4.7µH ±20%
at 25°C	DCR	110mΩ (Maximum)
100KHz 0.25V I _{rms} = 1.62A	ΔT	Temperature Rise 40°C (Maximum)

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

Test Data for Mechanical

Test Item	A mm	B mm	C mm	D mm	E mm
Specification	4 ±0.3	4.5 ±0.3	3.2 ±0.3	1 (Reference)	4.5 ±0.5
1	3.99	4.48	3.31	1.48	4.39
2		4.46	3.26	1.47	4.3
3	3.97	4.48	3.28	1.39	4.28
4	3.98	4.45	3.25	1.38	4.26
5		4.47	3.28	1.4	4.28
Average	3.98	4.47	3.28	1.42	4.3

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Ashok	08/02/11
CHECKED BY:	DATE:
Jagan	08/02/11
APPROVED BY:	DATE:
Farnell	22/02/11

DRAWING TITLE:

Inductor

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10003061	SD43-4R7MU	A
SCALE: NTS	U.O.M.: mm	SHEET: 1 OF 3	



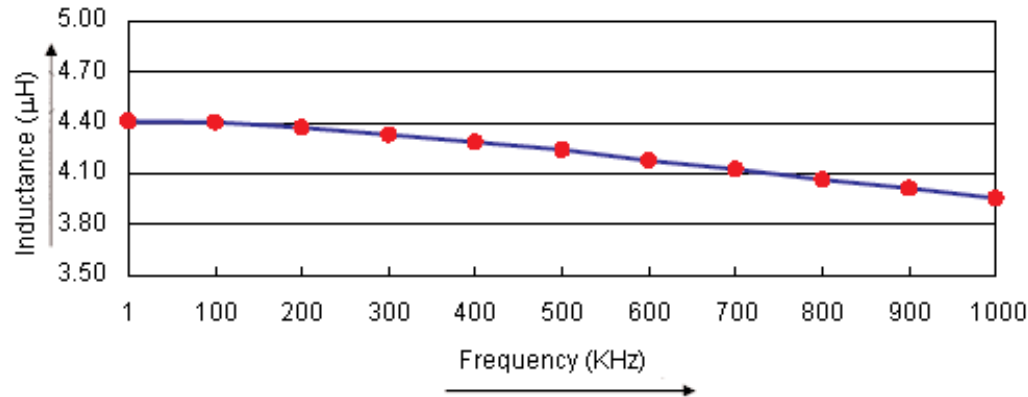
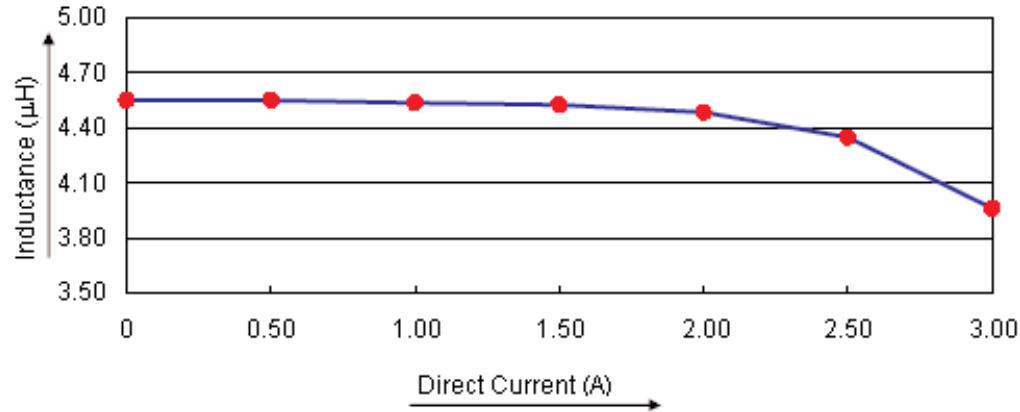
PART NO.

MCSD43-4R7MU

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Electric Characteristics



Test Data for Electrical

Test Item	L µH	DCR mΩ	ΔT
Condition	100KHz 0.25V	at 25°C	100KHz 0.25V I _{rms} = 1.62A
Specification	4.7 ±20%	110 (Maximum)	Temperature Rise 40°C (Maximum)
1	4.49	50.26	OK
2	4.46	49.65	OK
3	4.47	50.62	OK
4	4.46	51.24	OK
5	4.45	49.85	OK
Average	4.47	50.324	OK

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Jagan	08/02/11
APPROVED BY:	DATE:
Farnell	22/02/11

DRAWING TITLE:

Inductor

SIZE A	DWG NO. M10003061	ELECTRONIC FILE SD43-4R7MU	REV A
SCALE: NTS	U.O.M.: mm	SHEET: 2 OF 3	



PART NO.

MCS D43-4R7MU

REVISIONS

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-	A	RELEASED	Ashok	08/2/11	Jagan	08/2/11	Farnell	22/2/11

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 CDR4.5 x 3.2(ST) B2 F1.5
2	Wire	Ø0.25mm x 1P 2UEWF 155°C
3	Solder (Lead Free)	Sn99.3% / Cu0.7%

Part Number Table

Description	Part Number
Inductor, 4.7µH, 1.7A, 20%	MCS D43-4R7MU

<http://www.farnell.com>

<http://www.newark.com>

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

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Inductor			
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A	M10003061	SD43-4R7MU	A
SCALE: NTS	U.O.M.: mm	SHEET: 3 OF 3	