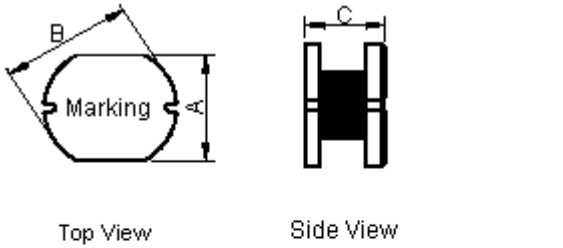
multicomp	PART NO. MCSD43-1R8MU	REVISIONS									
		ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
		-	A	RELEASED	Shashi	07/2/11	Jagan	07/2/11	Farnell	21/2/11

Configurations and Dimensions

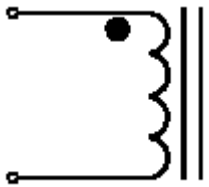


Dimensions : Millimetres

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	-

Marking: 1R8

Schematic Diagram



RoHS Compliant

Note:

1. Wire Ø0.29mm x 1P 2UEWF 155°C
2. 7.5TS (Reference)

Electrical Characteristics (at 25°C)

Test Condition		
100KHz 0.25V	L	1.8µH ±20%
at 25°C	DCR	64mΩ (Maximum)
100KHz 0.25V I_{sat} = 1.95 A	L at I_{sat}	L drops 10% (Typical)

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	4.08	4.52	3.29	1.21	4.36
2	4.07	4.53	3.32	1.31	
3	4.09		3.28	1.33	
4	4.05		3.27	1.3	4.33
5		4.55	3.28	1.35	4.37
Average	**4.07**	**4.53**	**3.29**	**1.3**	**4.36**

TOLERANCES:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

DRAWN BY:	DATE:
Shashi	07/02/11
CHECKED BY:	DATE:
Jagan	07/02/11
APPROVED BY:	DATE:
Farnell	21/02/11

DRAWING TITLE: Inductor

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10002654	SD43-1R8MU	A

SCALE: NTS | U.O.M.: mm | SHEET: 1 OF 3

multicomp

PART NO.

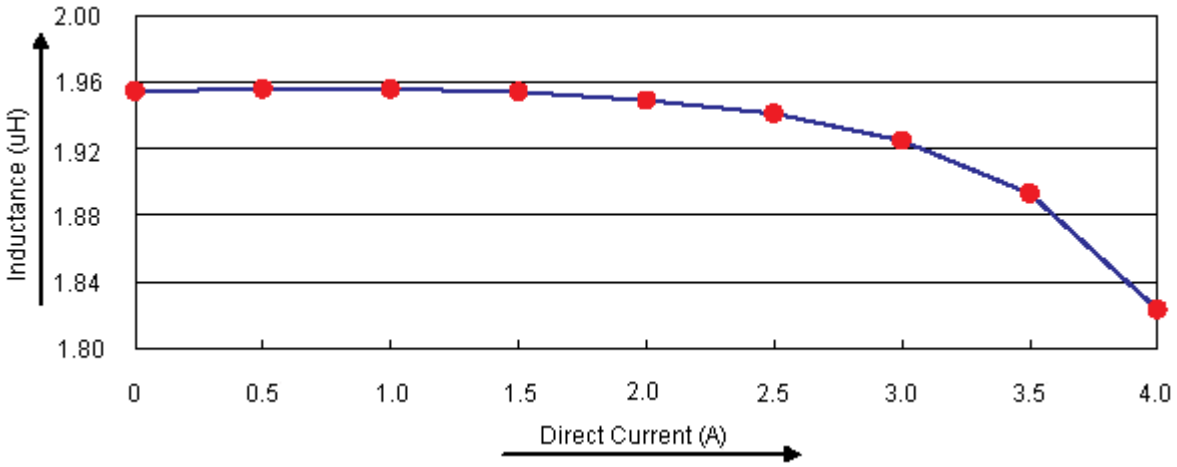
MCSD43-1R8MU

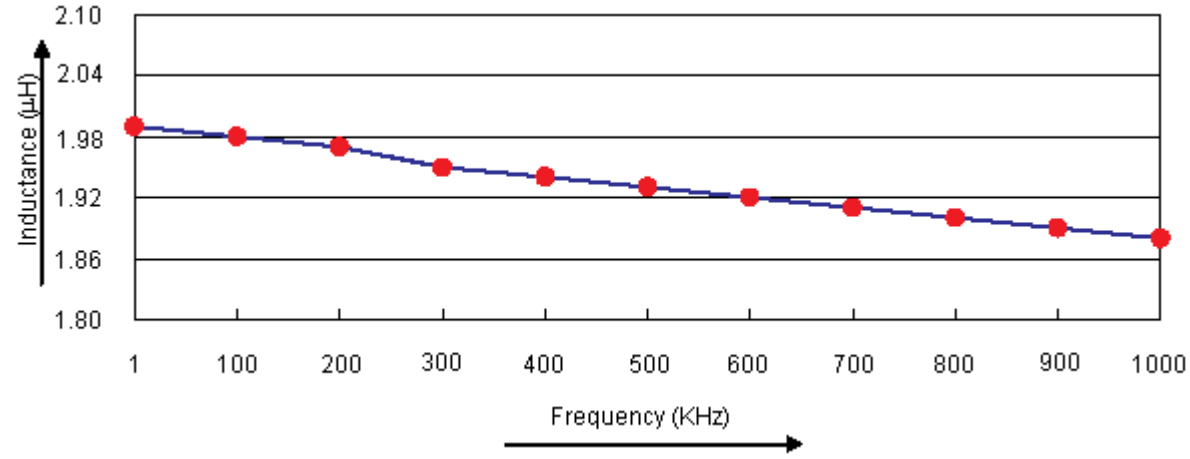
REVISIONS									
ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	Shashi	07/2/11	Jagan	07/2/11	Farnell	21/2/11

Test Data for Electrical

Test Item	L µH	DCR mΩ	L at I_{sat} µH
Condition	**100KHz 0.25V**	**at 25°C**	**100KHz 0.25 I_{sat} = 1.95A**
Specification	**1.8 ±20%**	**64 (Maximum)**	**L drops 10% (Typical)**
1	1.95	30.86	1.94
2		28.14	
3	1.94	28.73	1.93
4	1.95	29.41	1.95
5	1.9	31.95	1.89
Average	**1.94**	**29.818**	**1.93**

Electric Characteristics





TOLERANCES:

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Shashi	07/02/11
CHECKED BY:	DATE:
Jagan	07/02/11
APPROVED BY:	DATE:
Farnell	21/02/11

DRAWING TITLE: Inductor

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10002654	SD43-1R8MU	A

SCALE: NTS | U.O.M.: mm | SHEET: 2 OF 3

PART NO.	REVISIONS									
MCSD43-1R8MU	ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
	-	A	RELEASED	Shashi	07/2/11	Jagan	07/2/11	Farnell	21/2/11

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 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 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) B2.0 F1.5
2	Wire	Ø0.29mm*1P 2UEWF 155°C
3	Solder (Lead Free)	Sn99.3% / Cu0.7%

Part Number Table

Description	Part Number
Inductor, 1.8µH, 20%, 2.9A	MCSD43-1R8MU

http://www.farnell.com

http://www.newark.com

http://www.cpc.co.uk

TOLERANCES:

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DRAWN BY:	DATE:
Shashi	07/02/11
CHECKED BY:	DATE:
Jagan	07/02/11
APPROVED BY:	DATE:
Farnell	21/02/11

DRAWING TITLE: Inductor

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10002654	SD43-1R8MU	A

SCALE: NTS | U.O.M.: mm | SHEET: 3 OF 3