



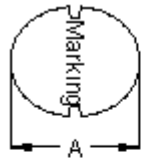
PART NO.

MCSDC1006-6R8MU

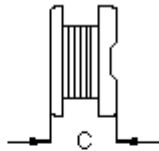
REVISIONS

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

Configurations and Dimensions

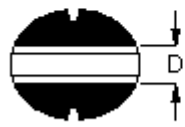


Top View

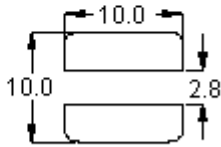


Side View

A	9.8 mm	(Maximum)
C	5.8 mm	(Maximum)
D	2.9 mm	(Reference)



Bottom View



Suggest PCB Layout

Dimensions : Millimetres

Marking : 6R8

Electrical Characteristics

(at 25°C)

Test Condition		
1KHz 1V	L	6.8μH ±20%
at 25°C	DCR	44mΩ (Maximum)
1KHz 1V I _{rms} = 3.40A	ΔT	Temperature Rise 40°C (Maximum)

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

Schematic Diagram



Note:

- (1) Wire Ø0.35mm x 2P 2UEF1/U 155°C
- (2) .5TS (Reference)

Test Data for Mechanical

Test Item	A mm	C mm	D mm
Specification	9.8 (Maximum)	5.8 (Maximum)	2.9 (Reference)
1	9.56	5.54	2.81
2	9.54	5.61	2.83
3	9.52	5.57	2.79
4	9.49	5.53	2.76
5	9.51	5.58	2.84
Average	9.52	5.57	2.81

This data sheet and its contents (the "Information") belong to the Premier Farnell Group (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. SPC MULTICOMP is the registered trademark of the Group. © Premier Farnell plc 2011.

TOLERANCES:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

DRAWN BY:	DATE:
Arun	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	M10003038	SDC1006-6R8MU	A
SCALE: NTS	U.O.M.: mm	SHEET: 1 OF 3	



PART NO.

MCSDC1006-6R8MU

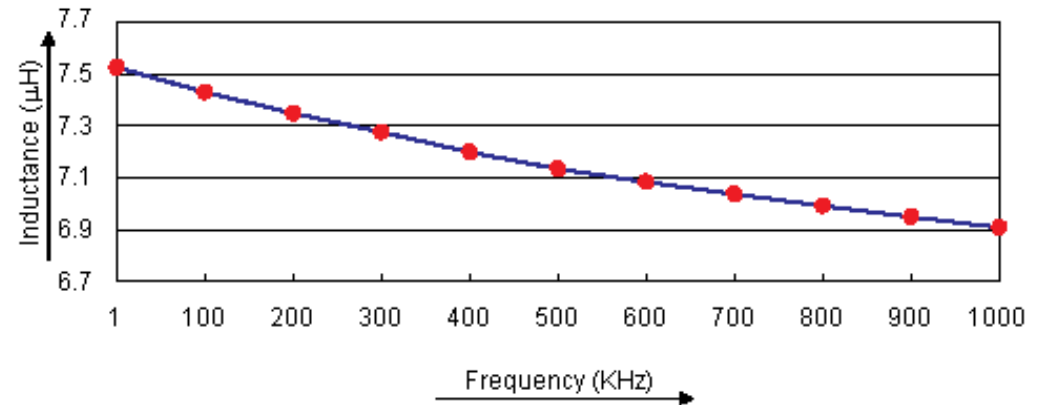
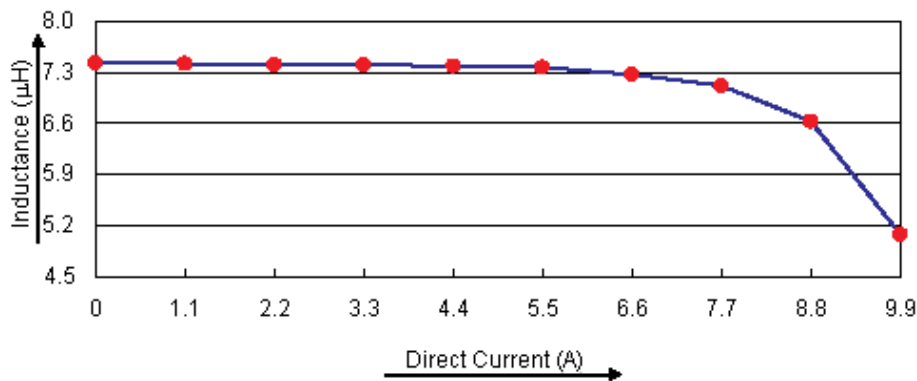
REVISIONS

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

Test Data for Electrical

Test Item	L μH	DCR mΩ	ΔT
Condition	1KHz 1V	at 25°C	1KHz 1V I _{rms} = 3.4A
Specification	6.8 ±20%	44 (Maximum)	Temperature Rise 40°C (Maximum)
1	7.52	26.13	OK
2	7.43	25.95	OK
3	7.38	26.06	OK
4	7.36	25.78	OK
5	7.41	26.02	OK
Average	7.42	25.99	OK

Electric Characteristics



This data sheet and its contents (the "Information") belong to the Premier Farnell Group (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. SPC MULTICOMP is the registered trademark of the Group. © Premier Farnell plc 2011.

**TOLERANCES:
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.**

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

DRAWING TITLE:

Inductor

SIZE A	DWG NO. M10003038	ELECTRONIC FILE SDC1006-6R8MU	REV A
SCALE: NTS		U.O.M.: mm	SHEET: 2 OF 3



PART NO.

MCSDC1006-6R8MU

REVISIONS

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

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	K22 DRM 9.5 x 5.5 RB-R B=4.5 F=3
2	Wire	Ø0.35mm x 2P 2UEF1/U 155°C
3	Solder (Lead Free)	Sn99.3% / Cu0.7%

Part Number Table

Description	Part Number
Inductors, 6.8µH, 20%, SMD	MCSDC1006-6R8MU

<http://www.farnell.com>

<http://www.newark.com>

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

This data sheet and its contents (the "Information") belong to the Premier Farnell Group (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. SPC MULTICOMP is the registered trademark of the Group. © Premier Farnell plc 2011.

TOLERANCES:
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

DRAWN BY:	DATE:
Arun	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	M10003038	SDC1006-6R8MU	A
SCALE: NTS		U.O.M.: mm	SHEET: 3 OF 3