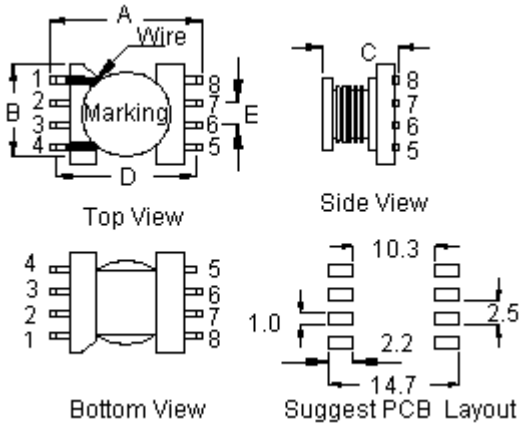
PART NO.	REVISIONS								
MCSDC0906-680KU	ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
	-	A	RELEASED	Sidhu	14/2/11	Jagan	14/2/11	Farnell	28/2/11

Configurations and Dimensions

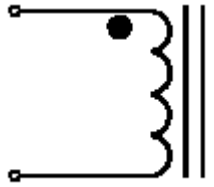


Dimensions : Millimetres

A	12.5 ±0.5 mm	-
B	10.5 mm	(Maximum)
C	6.3 mm	(Maximum)
D	11 ±0.5 mm	-
E	2.5 ±0.3 mm	-

Marking: 680

Schematic Diagram



RoHS Compliant

Note:

(1) Wire Ø0.25mm x 1P 2UEWF 155°C
(2) 35.5TS (Reference)

Electrical Characteristics

(at 25°C)

Test Condition		
1KHz 1V	L	68μH ±10%
at 25°C	DCR	310mΩ (Maximum)
1KHz 1V I_{rms} = 1A	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	**12.5 ±0.5**	**10.5 (Maximum)**	**6.3 (Maximum)**	**11 ±0.5**	**2.5 ±0.3**
1	12.46	10	5.88	10.93	2.48
2	12.43	10.02	5.84	10.91	2.43
3	12.48	9.99	5.91	10.93	2.38
4	12.45	10.02	5.83	10.96	2.41
5	12.46	10.01	5.81	10.98	2.46
Average	**12.46**	**10.01**	**5.85**	**10.94**	**2.43**

TOLERANCES:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

DRAWN BY:	DATE:
Sidhu	14/02/11
CHECKED BY:	DATE:
Jagan	14/02/11
APPROVED BY:	DATE:
Farnell	28/02/11

DRAWING TITLE: Inductor

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10003235	SDC0906-680KU	A

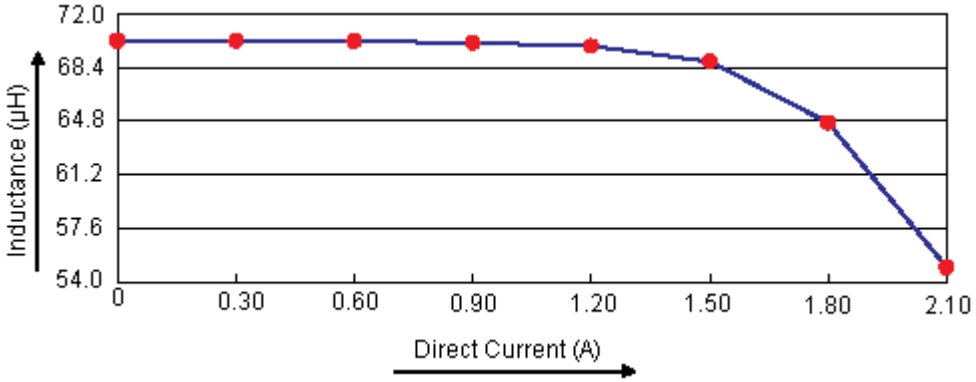
SCALE: NTS U.O.M.: mm SHEET: 1 OF 3

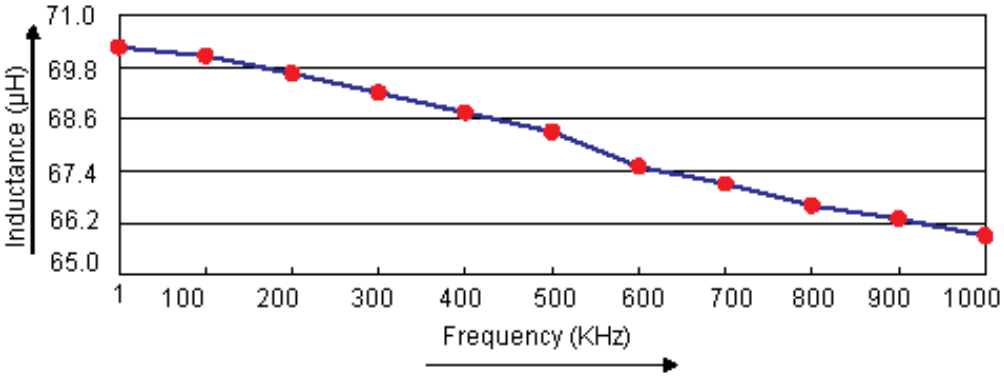
PART NO.	REVISIONS								
MCSDC0906-680KU	ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
	-	A	RELEASED	Sidhu	14/2/11	Jagan	14/2/11	Farnell	28/2/11

Test Data for Electrical

Test Item	L µH	DCR mΩ	ΔT
Condition	**1KHz 1V**	**at 25°C**	**1KHz 1V I_{rms} = 1A**
Specification	**68 ±10%**	**310 (Maximum)**	**Temperature Rise 40°C (Maximum)**
1	70.25	245.25	OK
2	70.21	237.85	OK
3	69.85	240.05	OK
4	70.1	241	OK
5	69.74	239.7	OK
Average	**70.03**	**240.77**	**OK**

Electric Characteristics





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Jagan	14/02/11
APPROVED BY:	DATE:
Farnell	28/02/11

DRAWING TITLE: Inductor

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10003235	SDC0906-680KU	A

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

multicomp

PART NO.

MCSDC0906-680KU

REVISIONS									
ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	Sidhu	14/2/11	Jagan	14/2/11	Farnell	28/2/11

Reliability Test

Test Item	Specifications	Test Method and Remarks
Operating temperature range	-550°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 DR9 x 4.1 B4.0 F2.15
2	Wire	Ø0.25mm x 1P 2UEWF 155°C
3	Solder (Lead Free)	Sn99.3% / Cu0.7%
4	Glue	TH320
5	Base	SB-001-3 LCP-E4008

Part Number Table

Description	Part Number
Inductors, 68µH, 10%, SMD	MCSDC0906-680KU

http://www.farnell.com

http://www.newark.com

http://www.cpc.co.uk

TOLERANCES:

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Jagan	14/02/11
APPROVED BY:	DATE:
Farnell	28/02/11

DRAWING TITLE: Inductor

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10003235	SDC0906-680KU	A

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