



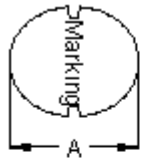
PART NO.

MCSDC1006-101KU

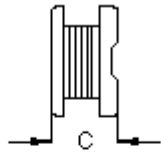
REVISIONS

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

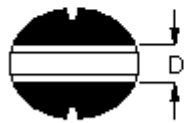
Configurations and Dimensions



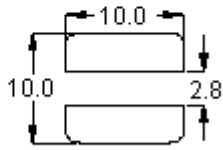
Top View



Side View



Bottom View

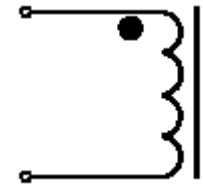


Suggest PCB Layout

Dimensions : Millimetres

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

Schematic Diagram



Note:

1. Wire Ø0.3mm x 1P 2UEF1/U 155°C
2. 47.5TS (Reference)

Marking : 101

Electrical Characteristics

(at 25°C)

Test Condition		
1KHz 1V	L	100µH ±10%
at 25°C	DCR	0.35Ω (Maximum)
1KHz 1V I _{rms} = 0.97A	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	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

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Arun	10/02/11
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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	M10003039	SDC1006-101KU	A
SCALE: NTS	U.O.M.: mm	SHEET: 1 OF 3	



PART NO.

MCSDC1006-101KU

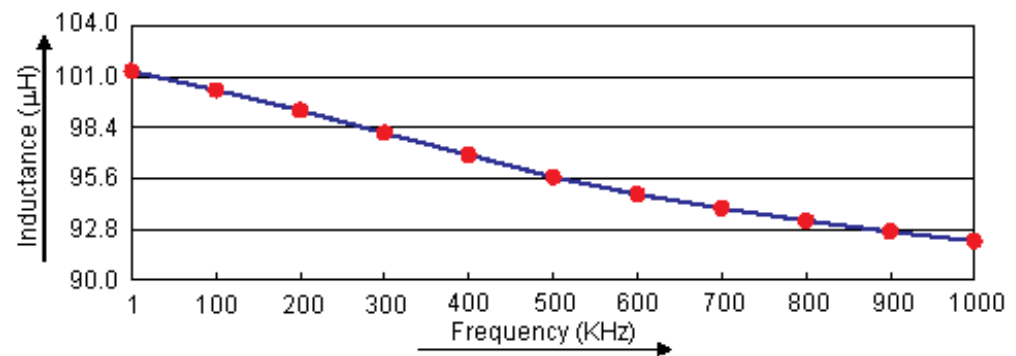
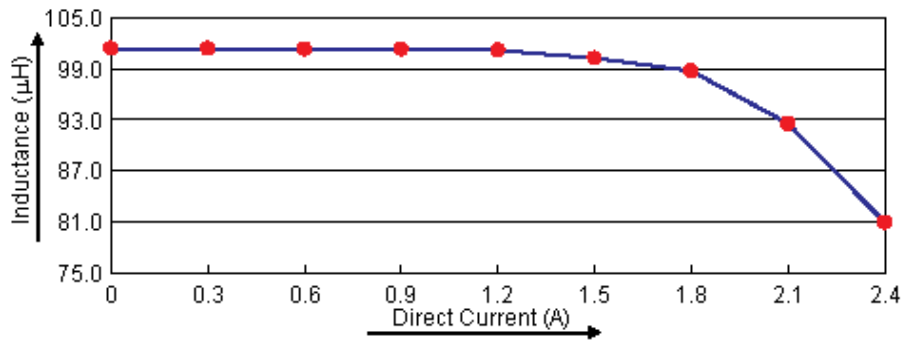
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Test Data for Electrical

Test Item	L μH	DCR Ω	ΔT
Condition	1KHz 1V	at 25°C	1KHz 1V I _{rms} = 0.97A
Specification	100 ±10%	0.35 (Maximum)	Temperature rise 40°C (Maximum)
1	101.7	0.26	OK
2	101.4		OK
3	100.85	0.27	OK
4	101.3	0.26	OK
5	101.25	0.27	OK
Average	101.3	0.26	OK

Electric Characteristics



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APPROVED BY:	DATE:
Farnell	24/02/11

DRAWING TITLE:			
Inductor			
SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10003039	SDC1006-101KU	A
SCALE: NTS		U.O.M.: mm	SHEET: 2 OF 3



PART NO.

MCSDC1006-101KU

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	Ø0.3mm x 1P 2UEF1/U155°C
3	Solder (Lead Free)	Sn99.3%/Cu0.7%

Part Number Table

Description	Part Number
Inductors, 100µH, 10%, SMD	MCSDC1006-101KU

<http://www.farnell.com>

<http://www.newark.com>

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

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DRAWING TITLE:

Inductor

SIZE A	DWG NO. M10003039	ELECTRONIC FILE SDC1006-101KU	REV A
SCALE: NTS		U.O.M.: mm	SHEET: 3 OF 3