



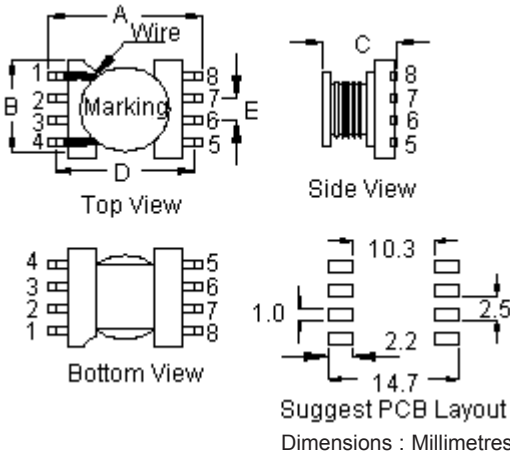
PART NO.

MCSDC0906-270KU

REVISIONS

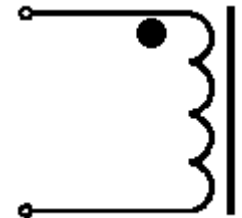
ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	Ashok	12/2/11	Jagan	12/2/11	Farnell	26/2/11

Configurations and Dimensions



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

Schematic Diagram



Note:

- (1) Wire Ø0.3mm x 1P 2UEWF 155°C
- (2) 21.5TS (Reference)

Marking: 270

Electrical Characteristics

(at 25°C)

Test condition		
1KHz 1V	L	27µH ±10%
at 25°C	DCR	150mΩ (Maximum)
1KHz 1V I <sub>rms</sub> = 1.4A	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

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TOLERANCES:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

DRAWN BY:

Ashok

CHECKED BY:

Jagan

APPROVED BY:

Farnell

DATE:

12/02/11

DATE:

12/02/11

DATE:

26/02/11

DRAWING TITLE:

Inductor

SIZE

A

DWG NO.

M10003476

ELECTRONIC FILE

SDC0906-270KU

REV

A

SCALE: NTS

U.O.M.: mm

SHEET: <1> OF 3



PART NO.

**MCSDC0906-270KU**

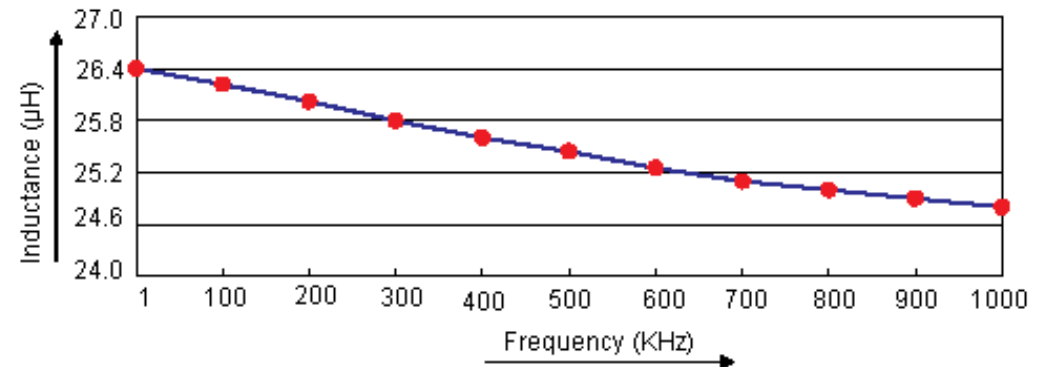
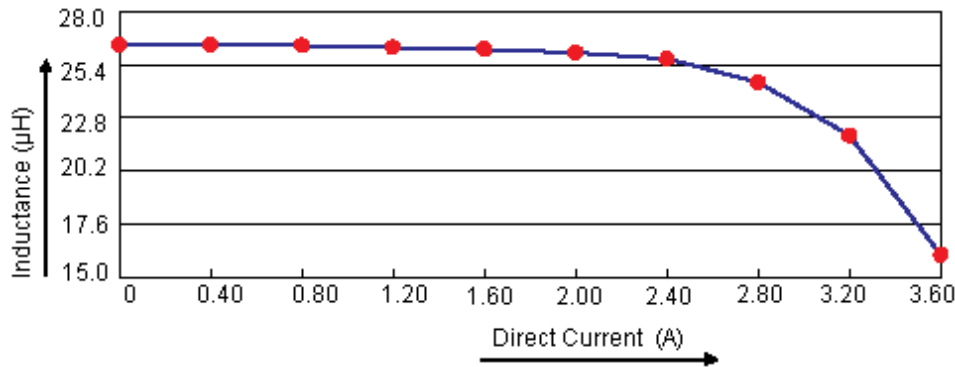
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**Test Data for Electrical**

Test Item	L μH	DCR mΩ	ΔT
Condition	1KHz 1V	at 25°C	1KHz 1V I <sub>rms</sub> = 1.4A
Specification	27 ±10%	150 (Maximum)	Temperature Rise 40°C (Maximum)
1	26.38	92.91	OK
2	26.28	92.96	OK
3	26.45	93.45	OK
4	26.74	92.75	OK
5	26.55	93.11	OK
<b>Average</b>	<b>26.48</b>	<b>93.04</b>	<b>OK</b>

**Electric Characteristics**



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Jagan	12/02/11
<b>APPROVED BY:</b>	<b>DATE:</b>
Farnell	26/02/11

<b>DRAWING TITLE:</b>			
<b>Inductor</b>			
<b>SIZE</b>	<b>DWG NO.</b>	<b>ELECTRONIC FILE</b>	<b>REV</b>
A	M10003476	SDC0906-270KU	A
<b>SCALE: NTS</b>		<b>U.O.M.: mm</b>	<b>SHEET: &lt;3&gt; OF 3</b>



PART NO.

**MCSDC0906-270KU**

**REVISIONS**

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**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 CDR9 x 4.1 B4.0 F2.15
2	Wire	Ø0.3mm 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, 27µH, 10%, SMD	MCSDC0906-270KU

<http://www.farnell.com>

<http://www.newark.com>

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

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Farnell	26/02/11

**DRAWING TITLE:**

**Inductor**

<b>SIZE</b> A	<b>DWG NO.</b> M10003476	<b>ELECTRONIC FILE</b> SDC0906-270KU	<b>REV</b> A
<b>SCALE: NTS</b>		<b>U.O.M.: mm</b>	<b>SHEET: &lt;4&gt; OF 3</b>