



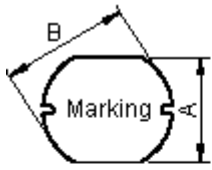
PART NO.

**MCSD106-602KU**

**REVISIONS**

ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	Shashi	09/2/11	Jagan	09/2/11	Farnell	23/2/11

**Configurations and Dimensions**



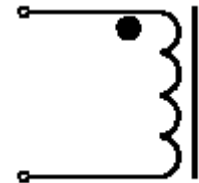
Top View



Side View

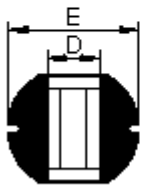
A	9 ±0.4 mm	-
B	10 ±0.4 mm	-
C	6.5 ±0.4 mm	-
D	3.5 mm	(Reference)
E	10 ±0.5 mm	-

**Schematic Diagram**

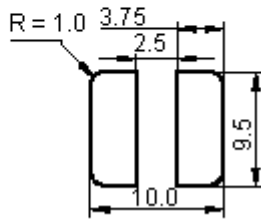


**Note:**

- Wire Ø0.12mm x 1P 2UEWF 155°C
- 370.5TS (Reference)



Bottom View



Suggest PCB Layout

Dimensions : Millimetres

Marking : 472  
YYWW

YY : Year  
WW : Week

**Electrical Characteristics**

(at 25°C)

Test Condition		
100KHz 0.25V	L	6mH ±10%
at 25°C	DCR	14Ω (Maximum)
100KHz 0.25V 1 <sub>rms</sub> = 0.27A	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	9 ±0.4	10 ±0.4	6.5 ±0.4	3.5 (Reference)	10 ±0.5
1	9.02	10.02	6.64	2.83	9.89
2	8.92	9.96	6.6	2.82	9.85
3	8.98	9.95	6.62	2.78	9.89
4	9.01	9.97	6.61	2.76	9.84
5	8.95	9.96	6.60	2.79	9.87
<b>Average</b>	<b>8.98</b>	<b>9.97</b>	<b>6.61</b>	<b>2.80</b>	<b>9.87</b>

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**DRAWN BY:**

Shashi

**DATE:**

09/02/11

**CHECKED BY:**

Jagan

**DATE:**

09/02/11

**APPROVED BY:**

Farnell

**DATE:**

23/02/11

**DRAWING TITLE:**

**Inductor**

SIZE  
**A**

DWG NO.

**M10002790**

ELECTRONIC FILE

**SD106-602KU**

REV

**A**

SCALE: NTS

U.O.M.: mm

SHEET: 1 OF 3



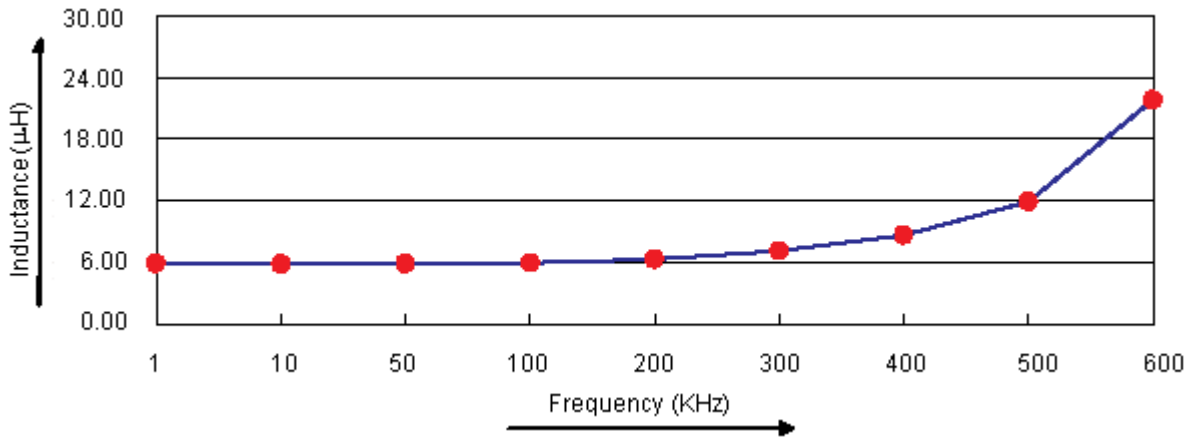
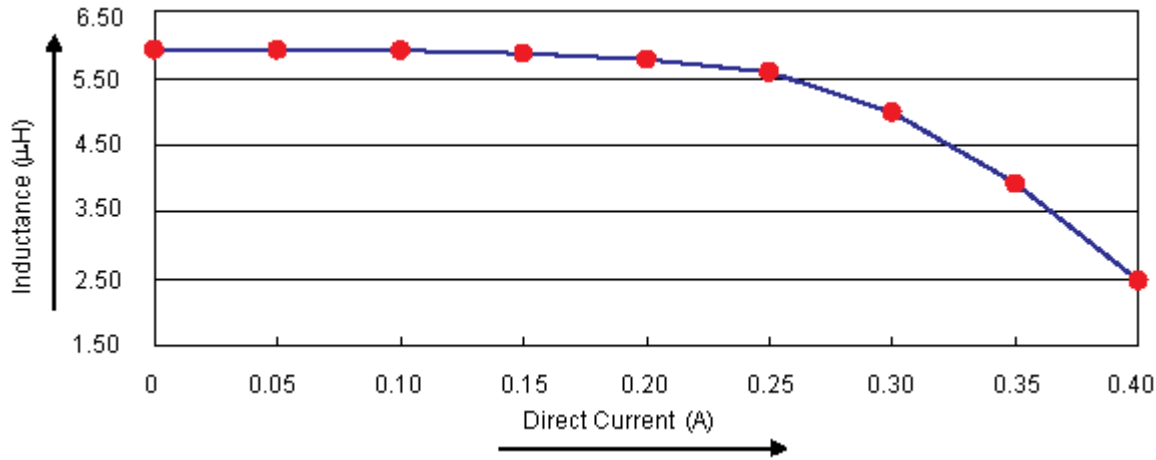
PART NO.

**MCSD106-602KU**

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**Electric Characteristics**



**Test Data for Electrical**

Test Item	L mH	DCR Ω	ΔT
Condition	100KHz 0.25V	at 25°C	100KHz 0.25V I <sub>rms</sub> = 0.27A
Specification	6 ±10%	14 (Maximum)	Temperature rise 40°C (Maximum)
1	6.04	11.67	OK
2	5.96	12	OK
3	6.03	11.98	OK
4	6.04	11.96	OK
5	6.14	11.89	OK
<b>Average</b>	<b>6.042</b>	<b>11.9</b>	<b>OK</b>

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Jagan	09/02/11
<b>APPROVED BY:</b>	<b>DATE:</b>
Farnell	23/02/11

**DRAWING TITLE:**

**Inductor**

<b>SIZE</b> A	<b>DWG NO.</b> M10002790	<b>ELECTRONIC FILE</b> SD106-602KU	<b>REV</b> A
<b>SCALE: NTS</b>		<b>U.O.M.: mm</b>	<b>SHEET: 2 OF 3</b>



PART NO.

MCS D106-602KU

REVISIONS

ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	Shashi	09/2/11	Jagan	09/2/11	Farnell	23/2/11

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	R5A CDR10 x 6.5 (ST) B4.7 F4
2	Wire	Ø0.12mm x 1P 2UEWF 155°C
3	Solder (Lead Free)	99.3%Sn0.7%Cu

Part Number Table

Description	Part Number
Inductor, 6mH, 10%, 2pins	MCS D106-602KU

<http://www.farnell.com>

<http://www.newark.com>

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

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Jagan	09/02/11
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Farnell	23/02/11

<b>DRAWING TITLE:</b>			
<b>Inductor</b>			
<b>SIZE</b>	<b>DWG NO.</b>	<b>ELECTRONIC FILE</b>	<b>REV</b>
A	M10002790	SD106-602KU	A
<b>SCALE: NTS</b>		<b>U.O.M.: mm</b>	<b>SHEET: 3 OF 3</b>