



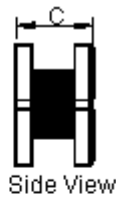
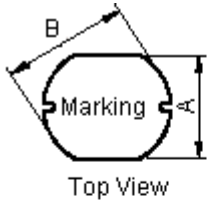
PART NO.

MCS D105-100MU

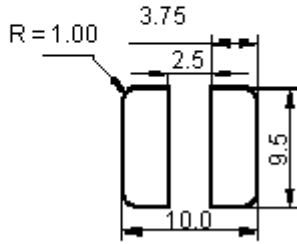
REVISIONS

ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	Shashi	07/2/11	Jagan	07/2/11	Farnell	21/2/11

Configurations and Dimensions



A	9 ±0.4 mm	-
B	10 ±0.4 mm	-
C	5.4 ±0.5 mm	-
D	3.5 mm	Reference
E	10.2 ±0.5 mm	-



Suggest PCB View  
Dimensions : Millimetres

Marking: 100  
YYWW

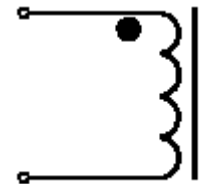
Electrical Characteristics

(at 25°C)

Test Condition		
100KHz 0.25V	L	10µH ±20%
at 25°C	DCR	60mΩ (Maximum)
100KHz 0.25V I <sub>rms</sub> = 2.60 A	ΔT	Temperature Rise 40°C (Maximum)

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

Schematic Diagram



Note:

- (1) Wire Ø0.45mm x 1P 2UEWF 155°C
- (2) 13.5TS (Reference)

Test Data for Mechanical

Test Item	A mm	B mm	C mm	D mm	E mm
Specification	9 ±0.4	10 ±0.4	5.4 ±0.5	3.5 (Reference)	10.2 ±0.5
1	9	9.86	5.47	3.41	9.8
2	9.05	9.89	5.46	3.47	9.81
3		9.95	5.54	3.39	9.83
4	9.03	9.76	5.58	3.41	
5	9.01	9.96	5.51	3.49	9.9
Average	9.03	9.88	5.51	3.43	9.83

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DRAWN BY:

Shashi

DATE:

07/02/11

CHECKED BY:

Jagan

DATE:

07/02/11

APPROVED BY:

Farnell

DATE:

21/02/11

DRAWING TITLE:

Inductor

SIZE A DWG NO.

M10002656

ELECTRONIC FILE SD105-100MU

REV A

SCALE: NTS

U.O.M.: mm

SHEET: 1 OF 3



PART NO.

MCS D105-100MU

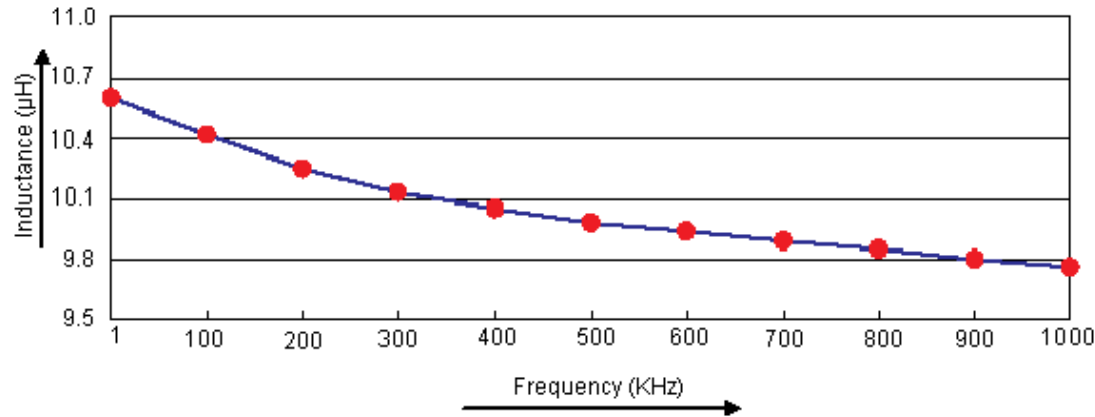
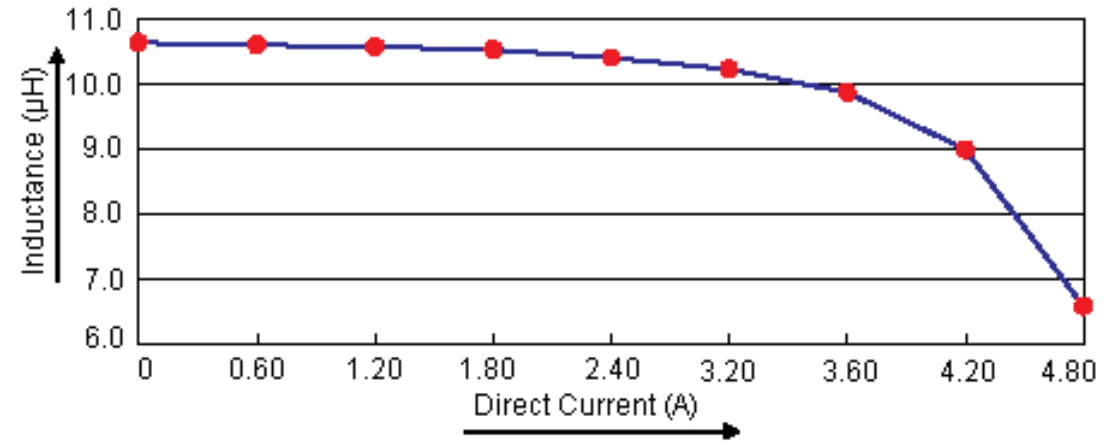
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Test Data for Electrical

Test Item	L μH	DCR mΩ	ΔT
Condition	100KHz 0.25V	at 25°C	100KHz 0.25 I <sub>rms</sub> = 2.60A
Specification	10 ±20%	60 (Maximum)	Temperature Rise 40°C (Maximum)
1	10.58	29.4	Ok
2	10.7	27.1	Ok
3	10.74	27.6	Ok
4	10.6	27.4	Ok
5		26.8	Ok
Average	10.644	27.66	Ok

Electric Characteristics



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<b>APPROVED BY:</b>	<b>DATE:</b>
Farnell	21/02/11

<b>DRAWING TITLE:</b>			
<b>Inductor</b>			
<b>SIZE</b>	<b>DWG NO.</b>	<b>ELECTRONIC FILE</b>	<b>REV</b>
A	M10002656	SD105-100MU	A
<b>SCALE: NTS</b>		<b>U.O.M.: mm</b>	<b>SHEET: 2 OF 3</b>



PART NO.

MCS D105-100MU

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 CDR10 x 5.4(ST) B3.8 F2.6
2	Wire	Ø0.45mm x 1P 2UEWF 155°C
3	Solder (Lead Free)	99.3%Sn0.7%Cu

Part Number Table

Description	Part Number
Inductor, 10µH, 20%, 2.6A	MCS D105-100MU

<http://www.farnell.com>

<http://www.newark.com>

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

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Farnell	21/02/11

<b>DRAWING TITLE:</b>			
<b>Inductor</b>			
<b>SIZE</b>	<b>DWG NO.</b>	<b>ELECTRONIC FILE</b>	<b>REV</b>
<b>A</b>	<b>M10002656</b>	<b>SD105-100MU</b>	<b>A</b>
<b>SCALE: NTS</b>		<b>U.O.M.: mm</b>	<b>SHEET: 3 OF 3</b>