



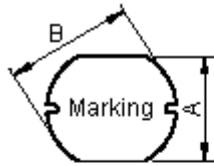
PART NO.

MCSD105-150MU

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

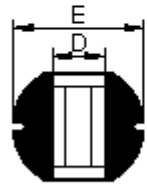


Top View

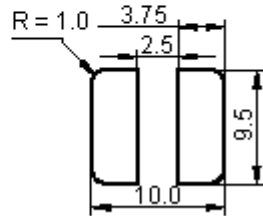


Side View

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	-



Bottom View



Suggest PCB Layout

Dimensions : Millimetres

Marking: **150**
YYWW

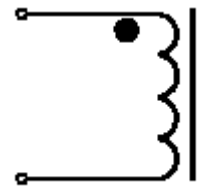
Electrical Characteristics

(at 25°C)

Test Condition		
100KHz 0.25V	L	15µH ±20%
at 25°C	DCR	40mΩ (Maximum)
100KHz 0.25V I _{rms} = 2.61 A	ΔT	Temperature Rise 40°C (Maximum)

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

Schematic Diagram



Note:

- (1) Wire Ø0.5mm x 1P 2UEWF 155°C
- (2) 17.5TS (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	8.97	9.96	5.42	3.02	9.86
2	8.96	9.97	5.43	3.03	9.83
3	8.98		5.45	3.01	9.84
4	8.97	9.98	5.43	2.98	9.85
5	8.96	9.96	5.41	2.99	
Average	8.97	9.97	5.43	3.01	9.85

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Shashi

CHECKED BY:

Jagan

APPROVED BY:

Farnell

DATE:

07/02/11

DATE:

07/02/11

DATE:

21/02/11

DRAWING TITLE:

Inductor

SIZE
A

DWG NO.

XXX

ELECTRONIC FILE
SD105-150MU

REV
A

SCALE: NTS

U.O.M.: mm

SHEET: 1 OF 3



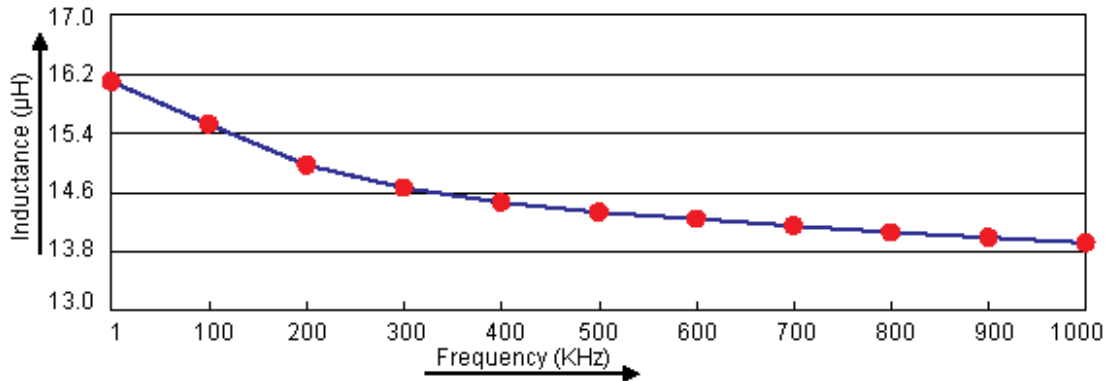
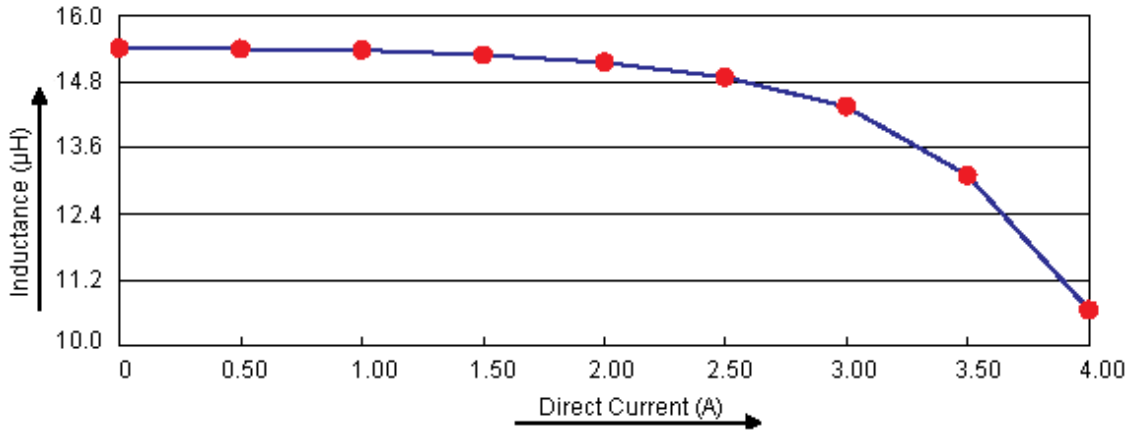
PART NO.

MCS D105-150MU

REVISIONS

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Electric Characteristics



Test Data for Electrical

Test Item	L µH	DCR mΩ	ΔT
Condition	100KHz 0.25V	at 25°C	100KHz 0.25 I _{rms} = 2.61A
Specification	15 ±20%	40 (Maximum)	Temperature Rise 40°C (Maximum)
1	15.43	31.73	Ok
2	14.65	31.26	Ok
3	15.32	30.15	Ok
4	14.81	30.14	Ok
5	15.34	31.34	Ok
Average	15.11	30.92	Ok

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Jagan	07/02/11
APPROVED BY:	DATE:
Farnell	21/02/11

DRAWING TITLE:

Inductor

SIZE A	DWG NO. XXX	ELECTRONIC FILE SD105-150MU	REV A
SCALE: NTS		U.O.M.: mm	SHEET: 2 OF 3



PART NO.

MCS D105-150MU

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	Ø0.50mm x 1P 2UEWF 155°C
3	Solder (Lead Free)	99.3%Sn0.7%Cu

Part Number Table

Description	Part Number
Inductor, 15µH, 20%, 2pins	MCS D105-150MU

<http://www.farnell.com>

<http://www.newark.com>

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

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Farnell	21/02/11

DRAWING TITLE:			
Inductor			
SIZE	DWG NO.	ELECTRONIC FILE	REV
A	XXX	SD105-150MU	A
SCALE: NTS		U.O.M.: mm	SHEET: 3 OF 3