



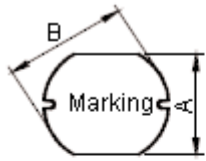
PART NO.

MCS D106-302KU

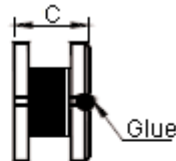
REVISIONS

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

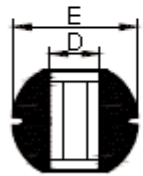


Top View

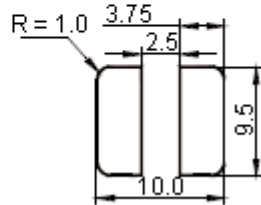


Side View

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	-



Bottom View



Suggest PCB Layout
Dimensions : Millimetres

Marking : 302
YYWW

YY : Year
WW : Week

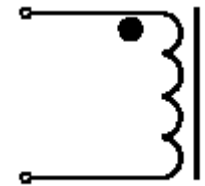
Electrical Characteristics

(at 25°C)

Test Condition		
100KHz 0.25V	L	3mH ±10%
at 25°C	DCR	7Ω (Maximum)
100KHz 0.25V 1 _{rms} = 0.4A	ΔT	Temperature rise 40°C (Maximum)

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

Schematic Diagram



Note:

1. Wire Ø0.15mm x 1P 2UEWF 155°C
2. 265.5TS (Reference)

Test Data for Mechanical

Test Item	A mm	B mm	C mm	D mm	E mm
Specification	9 ±0.4	10 ±0.4	6.5 ±0.4	3.5 (Reference)	10 ±0.5
1	8.98	9.98	6.59	2.9	9.78
2	8.99	10	6.52	2.93	9.74
3	9	9.95	6.62	2.74	
4	9.03	9.98	6.57	2.97	9.75
5	9	9.97	6.69	2.77	9.77
Average	9	9.98	6.6	2.86	9.76

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DRAWN BY:

Shashi

DATE:

09/02/11

DRAWING TITLE:

Inductor

CHECKED BY:

Jagan

DATE:

09/02/11

APPROVED BY:

Farnell

DATE:

23/02/11

SIZE DWG NO.

A

M10002787

ELECTRONIC FILE

SD106-302KU

REV

A

SCALE: NTS

U.O.M.: mm

SHEET: 1 OF 3



PART NO.

MCS D106-302KU

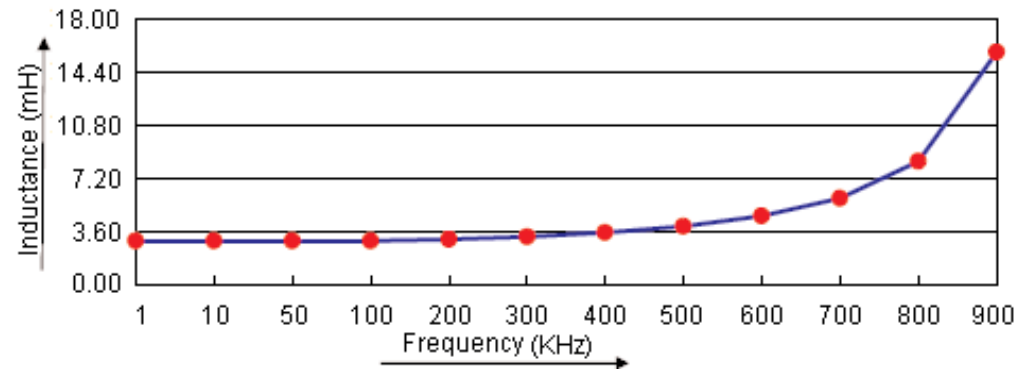
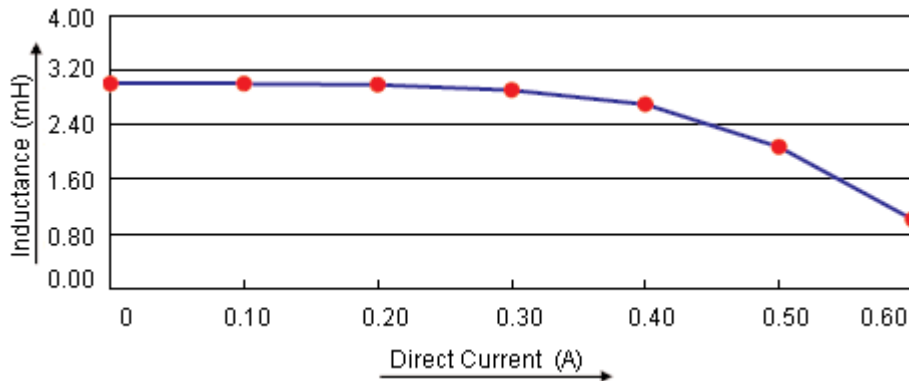
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Test Data for Electrical

Test Item	L μH	DCR Ω	ΔT
Condition	100KHz 0.25V	at 25°C	100KHz 0.25V I _{rms} = 0.4A
Specification	3 ±10%	7 (Maximum)	Temperature rise 40°C (Maximum)
1	2.95	5.61	OK
2	2.91	5.57	OK
3	2.92	5.59	OK
4	2.91	5.58	OK
5	2.95	5.56	OK
Average	2.928	5.58	OK

Electric Characteristics



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Jagan	09/02/11
APPROVED BY:	DATE:
Farnell	23/02/11

DRAWING TITLE:			
Inductor			
SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10002787	SD106-302KU	A
SCALE: NTS		U.O.M.: mm	SHEET: 2 OF 3



PART NO.

MCS D106-302KU

REVISIONS

ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
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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 6.5 (ST) B4.7 F4
2	Wire	Ø0.15mm x 1P 2UEWF 155°C
3	Solder (Lead Free)	99.3%Sn0.7%Cu
4	Glue	TH320

Part Number Table

Description	Part Number
Inductor, 3mH, 10%, 2pins	MCS D106-302KU

<http://www.farnell.com>

<http://www.newark.com>

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

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Jagan	09/02/11
APPROVED BY:	DATE:
Farnell	23/02/11

DRAWING TITLE:

Inductor

SIZE A	DWG NO. M10002787	ELECTRONIC FILE SD106-302KU	REV A
SCALE: NTS		U.O.M.: mm	SHEET: 3 OF 3