



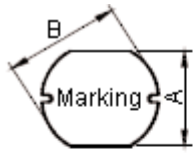
PART NO.

MCSD75-330KU

## REVISIONS

ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	Arun	10/2/11	Jagan	10/2/11	Farnell	24/2/11

## Configurations and Dimensions

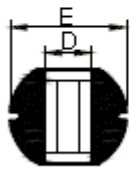


Top View

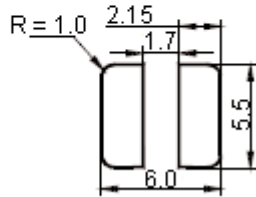


Side View

A	7 ±0.3 mm	-
B	7.8 ±0.3 mm	-
C	5 ±0.5 mm	-
D	3 mm	(Reference)
E	8 ±0.5 mm	-



Bottom View



Suggest PCB Layout

Dimensions : Millimetres

Marking : 330

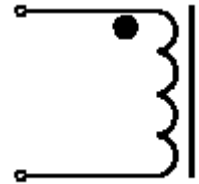
## Electrical Characteristics

(at 25°C)

Test Condition		
100KHz 0.25V	L	33μH ±10%
at 25°C	DCR	130mΩ (Maximum)
100KHz 0.25V I <sub>rms</sub> = 1.20A	ΔT	Temperature Rise 40°C (Maximum)

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

## Schematic Diagram



## Note:

- (1) Wire Ø0.35mm x 1P 2UEWF 155°C
- (2) 30.5TS (Reference)



## Test Data for Mechanical

Test Item	A mm	B mm	C mm	D mm	E mm
Specification	7 ±0.3	7.8 ±0.3	5 ±0.5	3 (Reference)	8 ±0.5
1	7.05	7.82	4.99	2.26	7.79
2	7.06		5.05	2.25	7.75
3	7.08	7.84	5.06	2.28	7.81
4	7.04	7.81	5.01	2.23	7.79
5	7.09	7.85	5.07	2.27	
Average	7.06	7.83	5.04	2.26	7.79

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## DRAWN BY:

Arun

## DATE:

10/02/11

## CHECKED BY:

Jagan

## DATE:

10/02/11

## APPROVED BY:

Farnell

## DATE:

24/02/11

## DRAWING TITLE:

Inductor

SIZE  
A

DWG NO.

M10003025

ELECTRONIC FILE  
SD75-330KUREV  
A

SCALE: NTS

U.O.M.: mm

SHEET: 1 OF 3



PART NO.

MCSD75-330KU

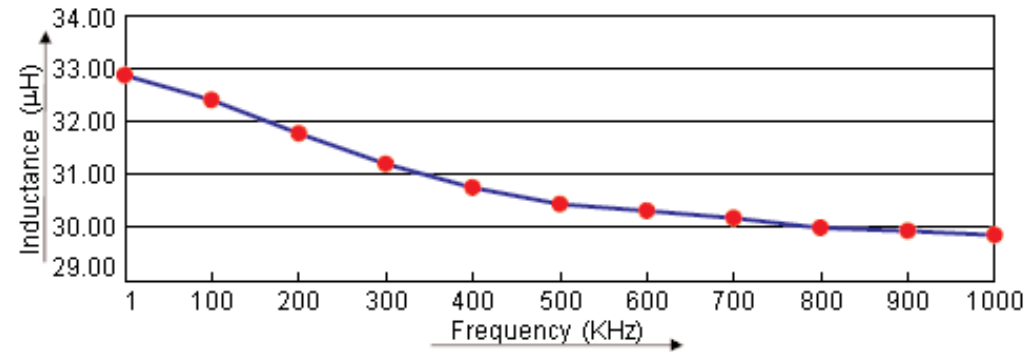
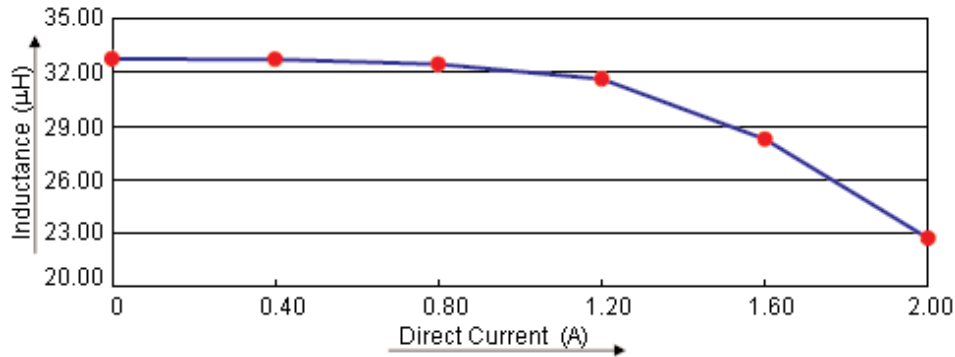
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## Test Data for Electrical

Test Item	L $\mu$ H	DCR m $\Omega$	$\Delta$ T
Condition	100KHz 0.25V	at 25°C	100KHz 0.25V $I_{rms} = 1.20A$
Specification	33 $\pm$ 10%	130 (Maximum)	Temperature Rise 40°C (Maximum)
1	32.13	89.5	OK
2	31.93	88.6	OK
3	31.95	91.8	OK
4	31.82	87.2	OK
5	31.78	87	OK
Average	31.92	88.82	OK

## Electric Characteristics



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10/02/11

CHECKED BY:

Jagan

DATE:

10/02/11

APPROVED BY:

Farnell

DATE:

24/02/11

DRAWING TITLE:

Inductor

SIZE  
A

DWG NO.

M10003025

ELECTRONIC FILE

SD75-330KU

REV

A

SCALE: NTS

U.O.M.: mm

SHEET: 2 OF 3



PART NO.

MCSD75-330KU

## 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 CDR7.8 x 5 (ST) B2.9 F2.5
2	Wire	Ø0.35mm x 1P 2UEWF 155°C
3	Solder (Lead Free)	Sn99.3% / Cu0.7%

## Part Number Table

Description	Part Number
Inductor, 33µH, 10%, SMD	MCSD75-330KU

<http://www.farnell.com><http://www.newark.com><http://www.cpc.co.uk>

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## DATE:

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## DRAWING TITLE:

Inductor

SIZE  
A

DWG NO.

M10003025

ELECTRONIC FILE

SD75-330KU

REV

A

SCALE: NTS

U.O.M.: mm

SHEET: 3 OF 3