



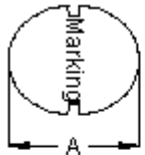
PART NO.

MCSDC0805-471KU

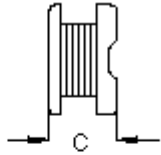
REVISIONS

ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	A	RELEASED	Ashok	12/2/11	Jagan	12/2/11	Farnell	26/2/11

Configurations and Dimensions

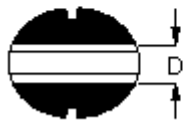


Top View

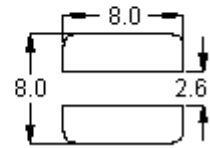


Side View

A	7.8 mm	(Maximum)
C	5.3 mm	(Maximum)
D	2.6 mm	(Reference)



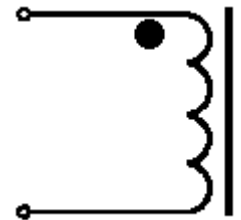
Bottom View



Suggest PCB Layout

Dimensions : Millimetres

Schematic Diagram



Note:

- (1) Wire Ø0.15mm x 1P 2UEWF 155°C
- (2) 109.5TS (Reference)

Marking: 471

Electrical Characteristics

(at 25°C)

Test condition		
1KHz 1V	L	470µH ±10%
at 25°C	DCR	1.96Ω (Maximum)
1KHz 1V I _{sat} = 0.5A	L at I _{sat}	L drops 35% (Maximum)
1KHz 1 V I _{rms} = 0.34A	ΔT	Temperature Rise 40°C (Maximum)

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

Test Data for Mechanical

Test Item	A mm	C mm	D mm
Specification	7.8 (Maximum)	5.3 (Maximum)	2.6 (Reference)
1	7.5	5.01	2.52
2	7.52	5.03	2.49
3	7.48	5.04	2.43
4	7.5	5.05	2.55
5	7.49	5.03	2.47
Average	7.5	5.03	2.49

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Ashok	12/02/11
CHECKED BY:	DATE:
Jagan	12/02/11
APPROVED BY:	DATE:
Farnell	26/02/11

DRAWING TITLE:

Inductor

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10003473	SDC0805-471KU	A
SCALE: NTS	U.O.M.: mm	SHEET: <1> OF 3	



PART NO.

MCSDC0805-471KU

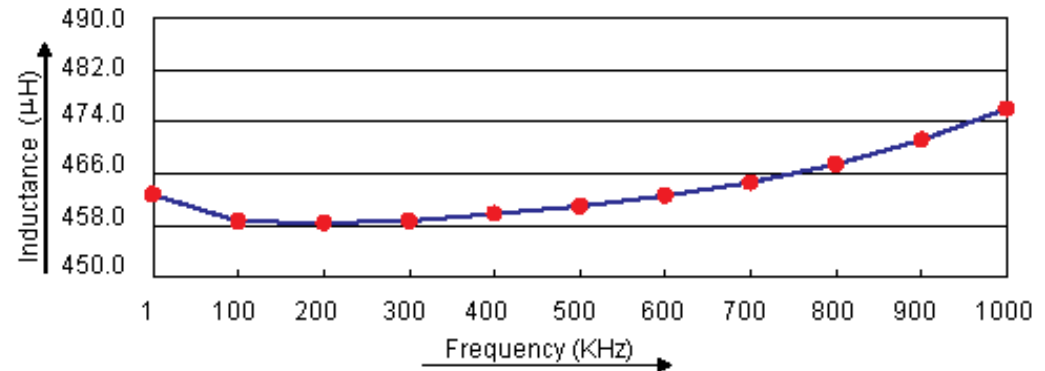
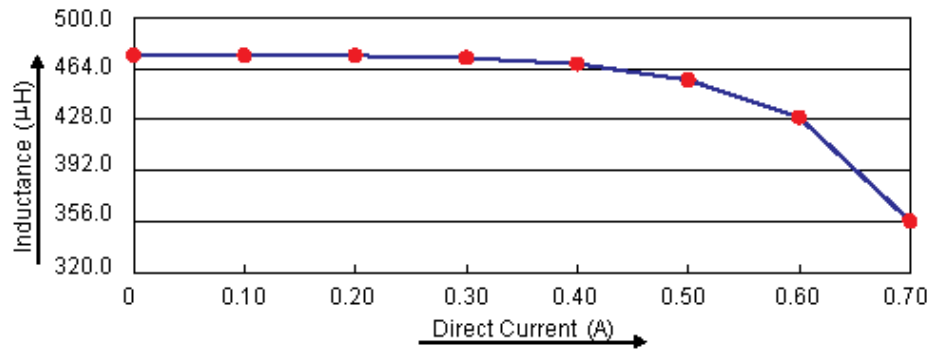
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Test Data for Electrical

Test Item	L μH	DCR Ω	L@I _{sat} μH	ΔT
Condition	1KHz 1V	at 25°C	1KHz 1V I _{sat} = 0.5A	1KHz 1V I _{rms} = 0.34A
Specification	470 ±10%	1.96 (Maximum)	L drops 35% (Maximum)	Temperature Rise 40°C (Maximum)
1	473.4	1.65	459.7	OK
2	462.75	1.65	451.25	OK
3	466.5	1.64	453.3	OK
4	471.05	1.64	457.8	OK
5	469.25	1.65	452.65	OK
Average	468.59	1.65	454.94	OK

Electric Characteristics



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DRAWING TITLE:

Inductor

SIZE A	DWG NO. M10003473	ELECTRONIC FILE SDC0805-471KU	REV A
SCALE: NTS		U.O.M.: mm	SHEET: <3> OF 3



PART NO.

MCSDC0805-471KU

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 CDR7.5 x 5 (ST) B3.4 F2.5
2	Wire	Ø0.15mm x 1P 2UEWF 155°C
3	Solder (LeadFree)	Sn99.3% / Cu0.7%

Part Number Table

Description	Part Number
Inductors, 470µH, 10%, SMD	MCSDC0805-471KU

<http://www.farnell.com>

<http://www.newark.com>

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

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A	M10003473	SDC0805-471KU	A
SCALE: NTS		U.O.M.: mm	SHEET: <4> OF 3