



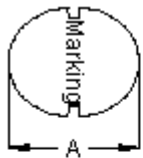
PART NO.

MCSDC0805-220MU

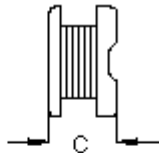
REVISIONS

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

Configurations and Dimensions

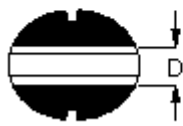


Top View

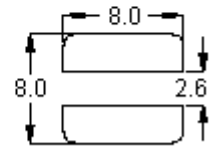


Side View

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



Bottom View



Suggest PCB Layout

Dimensions : Millimetres

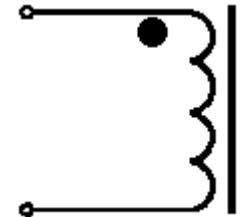
Marking: 220

Electrical Characteristics

Test condition		
1KHz 1V	L	2.2μH ±20%
at 25°C	DCR	110mΩ (Maximum)
1KHz 1V I _{sat} = 2.3A	L at I _{sat}	L drops 35% (Maximum)
1KHz 1V I _{rms} = 1.5A	ΔT	Temperature Rise 40°C (Maximum)

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

Schematic Diagram



Note:

- (1) Wire Ø0.3mm x 1P 2UEWF 155°C
- (2) 24.5TS (Reference)

Test Data for Mechanical

Test Item	A mm	C mm	D mm
Specification	7.8 (Maximum)	5.3 (Maximum)	2.6 (Reference)
1	7.52	5.06	2.56
2	7.51	5.04	2.55
3	7.49	5.02	2.48
4	7.51	5.03	2.53
5	7.53	5.05	2.51
Average	7.51	5.04	2.53

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DRAWN BY:	DATE:
Ashok	10/02/11
CHECKED BY:	DATE:
Jagan	10/02/11
APPROVED BY:	DATE:
Farnell	24/02/11

DRAWING TITLE:

Inductor

SIZE	DWG NO.	ELECTRONIC FILE	REV
A	M10003199	SDC0805-220MU	A
SCALE: NTS	U.O.M.: mm	SHEET: 1 OF 3	



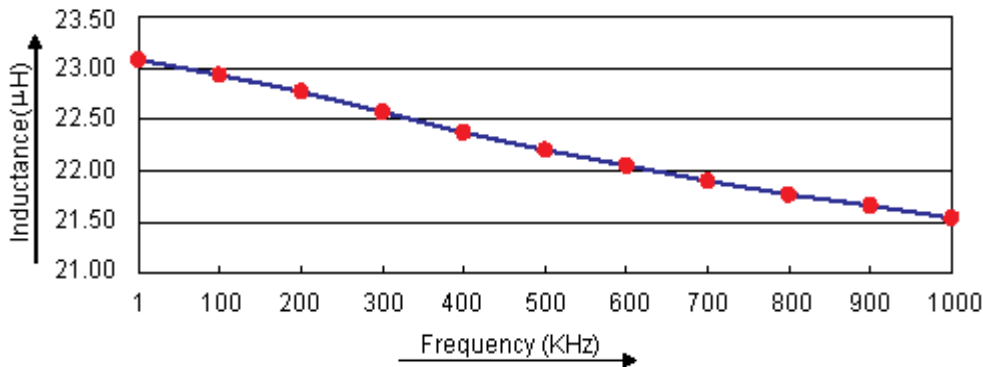
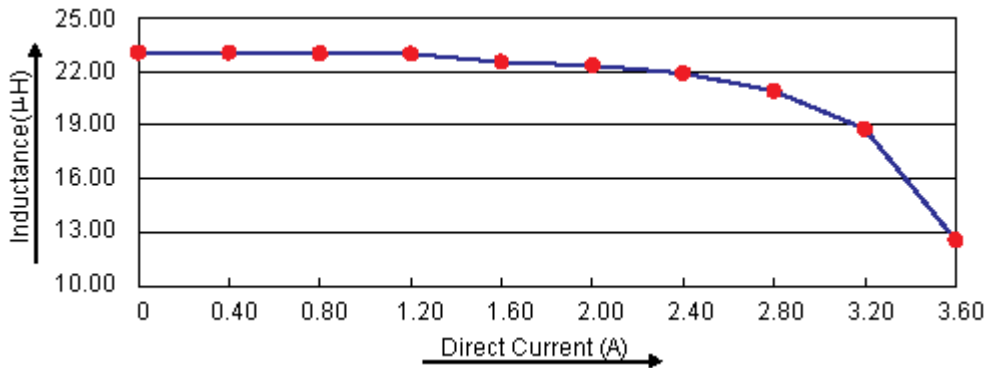
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-	A	RELEASED	Ashok	10/2/11	Jagan	10/2/11	Farnell	24/2/11

Electric Characteristics



Test Data for Electrical

Test Item	L μH	DCR mΩ	L at I _{sat} μH	ΔT
Condition	1KHz 1V	at 25°C	1KHz 1V I _{sat} = 2.3A	1KHz 1V I _{rms} = 1.5A
Specification	22 ±20%	110 (Maximum)	L drops 35% (Maximum)	Temperature Rise 40°C (Maximum)
1	23.04	94.7	22.73	OK
2	23.44	95.5	22.96	OK
3	22.95	96.15	22.4	OK
4	23.1	95.8	22.55	OK
5	23.25	95.95	22.8	OK
Average	23.16	95.62	22.69	OK

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Jagan	10/02/11
APPROVED BY:	DATE:
Farnell	24/02/11

DRAWING TITLE:			
Inductor			
SIZE A	DWG NO. M10003199	ELECTRONIC FILE SDC0805-220MU	REV A
SCALE: NTS	U.O.M.: mm	SHEET: 2 OF 3	



PART NO.

MCSDC0805-220MU

REVISIONS

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

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	Ø0.3mm x 1P 2UEWF 155°C
3	Solder (Lead Free)	Sn99.3% / Cu0.7%

Part Number Table

Description	Part Number
Inductors, 22µH, 20%, SMD	MCSDC0805-220MU

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

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Farnell	24/02/11

DRAWING TITLE:			
Inductor			
SIZE A	DWG NO. M10003199	ELECTRONIC FILE SDC0805-220MU	REV A
SCALE: NTS	U.O.M.: mm	SHEET: 3 OF 3	