



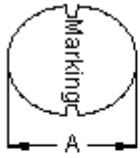
PART NO.

MCSDC1006-220MU

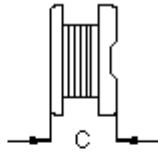
REVISIONS

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

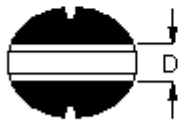


Top View

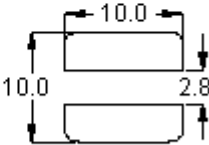


Side View

A	9.8 mm	(Maximum)
C	5.8 mm	(Maximum)
D	2.9 mm	(Reference)



Bottom View



Suggest PCB Layout

Dimensions : Millimetres

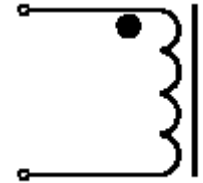
Marking: 220

Electrical Characteristics (at 25°C)

Test Condition		
1KHz 1V	L	22μH ±20%
at 25°C	DCR	100mΩ (Maximum)
1KHz 1V I _{rms} = 1.95A	ΔT	Temperature Rise 40°C (Maximum)

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

Schematic Diagram



Note:

- Wire Ø0.4mm x 1P 2UEF1/U 155°C
- 21.5TS (Reference)



Test Data for Mechanical

Test Item	A mm	C mm	D mm
Specification	9.8 (Maximum)	5.8 (Maximum)	2.9 (Reference)
1	9.56	5.54	2.81
2	9.54	5.61	2.83
3	9.52	5.57	2.79
4	9.49	5.53	2.76
5	9.51	5.58	2.84
Average	9.52	5.57	2.81

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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.

M10003046

ELECTRONIC FILE

SDC1006-220MU

REV

A

SCALE: NTS

U.O.M.: mm

SHEET: 1 OF 3



PART NO.

MCSDC1006-220MU

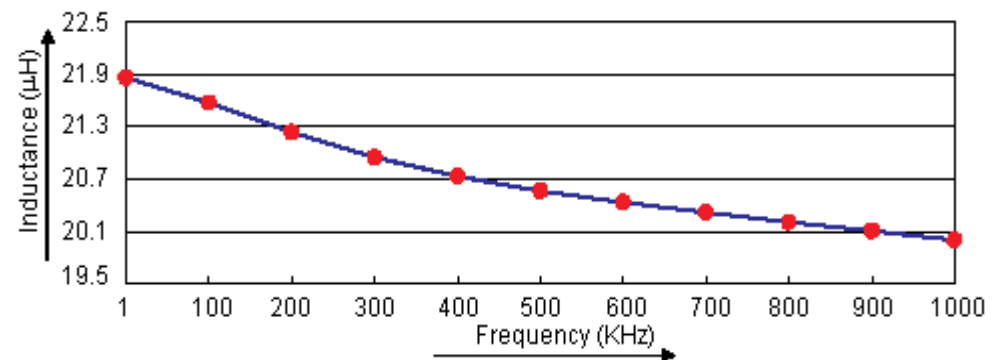
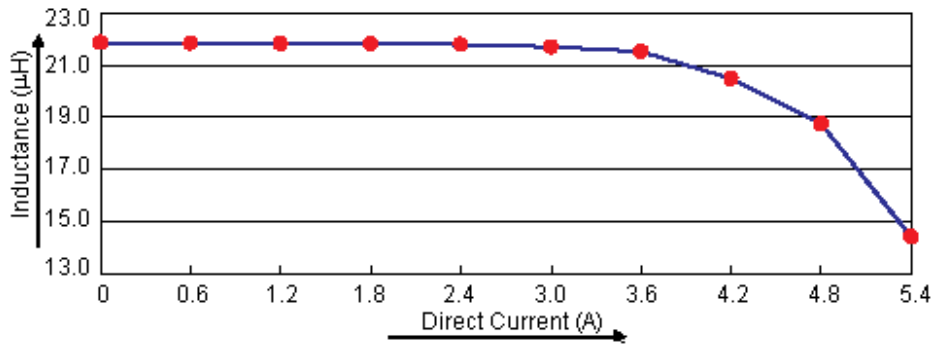
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Test Data for Electrical

Test Item	L μ H	DCR m Ω	Δ T
Condition	1KHz 1V	at 25°C	1KHz 1V $I_{rms} = 1.95A$
Specification	22 $\pm$ 20%	100 (Maximum)	Temperature Rise 40°C (Maximum)
1	21.86	65.22	OK
2	21.91	64.77	OK
3	21.77	65.15	OK
4	21.83	64.89	OK
5	21.75	65.03	OK
Average	21.82	65.01	OK

Electric Characteristics



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Jagan

DATE:

10/02/11

APPROVED BY:

Farnell

DATE:

24/02/11

DRAWING TITLE:

Inductor

SIZE
A

DWG NO.

M10003046

ELECTRONIC FILE

SDC1006-220MU

REV

A

SCALE: NTS

U.O.M.: mm

SHEET: 2 OF 3



PART NO.

MCSDC1006-220MU

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	K22 DRM 9.5 x 5.5 RB-R B = 4.5 F = 3
2	Wire	Ø0.4mm x 1P 2UEF1/U 155°C
3	Solder (Lead Free)	Sn99.3%/Cu0.7%

Part Number Table

Description	Part Number
Inductors, 22µH, 20%, SMD	MCSDC1006-220MU

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

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SDC1006-220MU

REV

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SCALE: NTS

U.O.M.: mm

SHEET: 3 OF 3