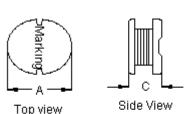


PART NO.

MCSDC1006-4R7MU

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

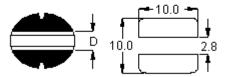
Configurations and Dimensions



А	9.8 mm	(Maximum)
С	5.8 mm	(Maximum)
D	2.9 mm	(Reference)

Schematic Diagram





Bottom View

Suggest PCB Layout

Dimensions: Millimetres

Marking : 4R7

Electrical Characteristics

(at 25°C)

Test Condition		
1KHz 1V	L	4.7μH ±20%
at 25°C	DCR	36mΩ (Maximum)
1KHz 1V Irms = 4A	ΔΤ	Temperature Rise 40°C (Maximum)

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

(1) Wire Ø0.35mm x 2P 2UEF1/U 155°C

(2) 9.5TS (Reference)

Note:

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

This data sheet and its contents (the "Information") belong to the Premier Farnell Group (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from engligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group is liability for death or personal injury resulting from its registered trademark of the Group. © Premier Famell pic 2011.

TOLERANCES: DRAW

UNLESS OTHERWISE
SPECIFIED,
DIMENSIONS ARE
FOR REFERENCE
PURPOSES ONLY.

DRAW
Arun
CHECK
Arun
CHECK
Arun
CHECK
Farnell

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

	DRAWING TITLE:							
	Inductor							
	SIZE	DWG NO.	M10003037	ELEC SD	REV A			
SCALE: NTS			U.O.M.: mm		SHEET: 1 O	F 3		



PART NO.

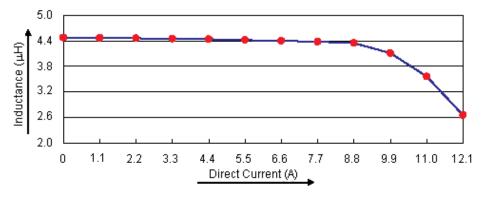
MCSDC1006-4R7MU

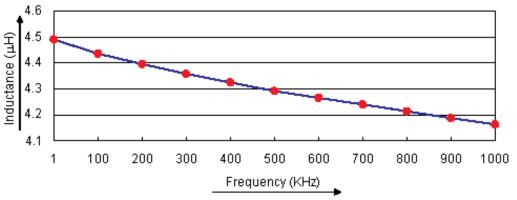
REVISIONS								
ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	Α	RELEASED	Arun	10/2/11	Jagan	10/2/11	Farnell	24/2/11

Test Data for Electrical

Test Item	L μH	DCR mΩ	ΔΤ
Condition	1KHz 1V	at 25°C	1KHz 1V I _{rms} = 4A
Specification	4.7 ±20%	36 (Maximum)	Temperature Rise 40°C (Maximum)
1	4.5	19.47	OK
2	4.48	19.78	OK
3	4.45	19.89	OK
4	4.46	20.03	OK
5	4.43	19.56	OK
Average	4.46	19.75	ок

Electric Characteristics





This data sheet and its contents (the "Information") belong to the Premier Farnell Group (the "Group") or are licensed to it. No licence is ig rantled for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from engligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injuny resulting from its registered trademark of the Group. © Premier Farnell plc 2011.

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

TOLERANCES:

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

DRAWI	NG TITLE:							
		Inducto	or					
SIZE A	DWG NO.	M10003037	· ·	TRONIC FII C1006-4R7			REV A	
SCAL	E: NTS	U.O.M.: mm		SHEET:	2	OF	3	



RT	

MCSDC1006-4R7MU

REVISIONS								
ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	Α	RELEASED	Arun	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	K22 DRM 9.5 x 5.5 RB-R B=4.5 F=3			
2	Wire	Ø0.35mm x 2P 2UEF1/U 155°C			
3	Solder (Lead Free)	Sn99.3% / Cu0.7%			

Part Number Table

Description	Part Number		
Inductors, 4.7µH, 20%, SMD	MCSDC1006-4R7MU		

http://www.farnell.com

http://www.newark.com

http://www.cpc.co.uk

This data sheet and its contents (the "Information") belong to the Premier Farnell Group (the "Group") or are si licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or or mission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence.

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.
SPECIFIED,
DIMENSIONS ARE
FOR REFERENCE
PURPOSES ONLY.

TOLERANCES:

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

DRAWI	NG TITLE:						
Inductor							
SIZE A	DWG NO.	W10003037 ELECTRONIC FILE SDC1006-4R7MU			REV A		
 SCAL	E: NTS	U.O.M.: mm		SHEET:	3	OF	3