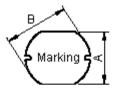
	PABT NO.			REVISIONS						
	I <sup>-</sup> I	ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
		-	А	RELEASED	Shashi	09/2/11	Jagan	09/2/11	Farnell	23/2/11

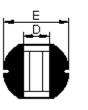
### **Configurations and Dimensions**

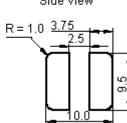




Top View

Side View





Bottom View

Suggest PCB Layout **Dimensions : Millimetres** 

Marking : 802	YY	: Year
YYWW	WW	: Week

#### **Electrical Characteristics**

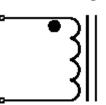
(at 25°C)

Test Condition		
100KHz 0.25V	L	8mH ±10%
at 25°C	DCR	18Ω (Maximum)
100KHz 0.25V 1rms = 0.18A	ΔΤ	Temperature rise 40°C (Maximum)

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

А	9 ±0.4 mm	-
В	10 ±0.4 mm	-
С	5.4 ±0.5 mm	-
D	3.5 mm	(Reference)
E	10.2 ±0.5 mm	-

#### **Schematic Diagram**





#### Note:

1. Wire Ø0.1mm x 1P 2UEWF 155°C 2. 380.5TS (Reference)

#### **Test Data for Mechanical**

Test Item	A mm	B mm	C mm	D mm	E mm
Specification	9 ±0.4	10 ±0.4	5.4 ±0.5	3.5 (Reference)	10.2 ±0.5
1	9.06	10.04	5.52	3.27	9.99
2	9.08	9.98	5.48	3.41	9.89
3	9.04	10.1	5.47	3.49	9.99
4	9.08	9.96	5.48	3.47	10.01
5	9.05	9.93	5.46	3.33	10.02
Average	9.06	10	5.48	3.39	9.98

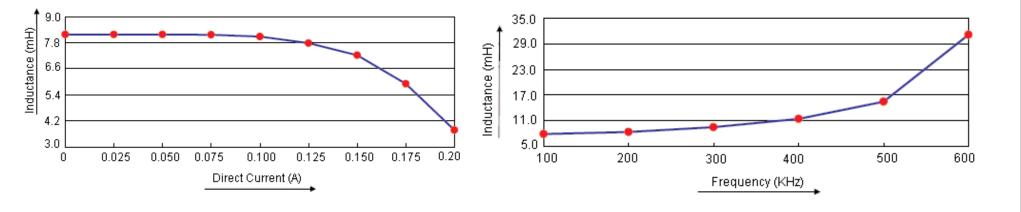
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believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this	SPECIFIED,	CHECKED BY:	DATE:	SIZE DWG NO.		ELECTRONIC FILE	REV
data sheet should check for themselves the Information and the suitability of the prod- ucts for their purpose and not make any assumptions based on information included or	DIMENSIONS ARE	Jagan	09/02/11	Δ	M10002784	SD105-802KU	Α
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	MCSD105-802KU	-	А	RELEASED	Shashi	09/2/11	Jagan	09/2/11	Farnell	23/2/11

### **Test Data for Electrical**

Test Item	L µH	DCR mΩ	ΔΤ
Condition	100KHz 0.25V	at 25°C	100KHz 0.25V I <sub>rms</sub> = 0.18A
Specification	8 ±10%	18 (Maximum)	Temperature rise 40°C (Maximum)
1	8.11	14.91	ОК
2	8.25	14.98	ОК
3	0.25	15.02	ОК
4	8.3	15.04	ОК
5	8.27	14.98	ОК
Average	8.236	14.99	ОК

### **Electric Characteristics**



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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	According to J-STD-020B level 3 Test condition :60°C 60% RH Test duration :40 hours
MOISTURE SENSITIVITY	DCR change : Within ±20% Inductance change : Within ±20%	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.	ltem	Material Description
1	Core	R5A CDR10 x 5.4 (ST) B3.8 F2.6
2	Wire	Ø0.1mm x 1P 2UEWF 155°C
3	Solder (Lead Free)	99.3%Sn0.7%Cu

# Part Number Table

Description	Part Number	
Inductor, 8mH, 10%, 2pins	MCSD105-802KU	

http://www.farnell.com

http://www.newark.com

http://www.cpc.co.uk

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