

#### PART NO.

### MCSD75-183KU

В

С

D

Ε

7 ±0.3 mm

7.8 ±0.3 mm

5 ±0.5 mm

3 mm

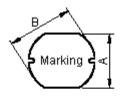
8 ±0.5 mm

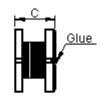
(Reference)

		REVISIONS						
ECN #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
-	Α	RELEASED	Arun	09/2/11	Jagan	09/2/11	Farnell	23/2/11

RoHS

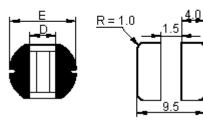
## **Configurations and Dimensions**





Top View

Side View



**Bottom View** 

Suggest PCB Layout

Dimensions : Millimetres

Marking: 183

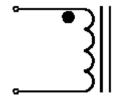
### **Electrical Characteristics**

(at 25°C)

Test Condition		
100KHz 0.25V	L	18mH ±10%
at 25°C	DCR	72Ω (Maximum)
100KHz 0.25V I <sub>rms</sub> = 0.05A	ΔΤ	Temperature Rise 40°C (Maximum)

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

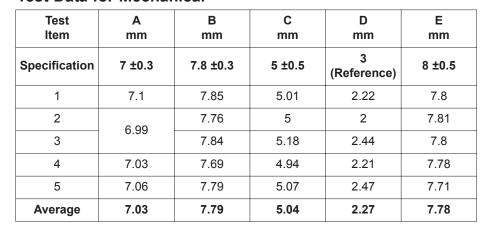
### **Schematic Diagram**





- (1) Wire Ø0.06mm x 1P 2UEWF 155°C
- (2) 680.5TS (Reference)

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



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CHECKED BY:	DATE:
Jagan	09/02/11
APPROVED BY:	DATE:
Farnell	23/02/11

	DRAWI	NG TITLE:							
	Inductor								
	SIZE A	DWG NO.	M10003017	ELECTRONIC FILE SD75-183KU			REV A		
SCALE: NTS		E: NTS	U.O.M.: mm		SHEET: 1	OF	= 3		

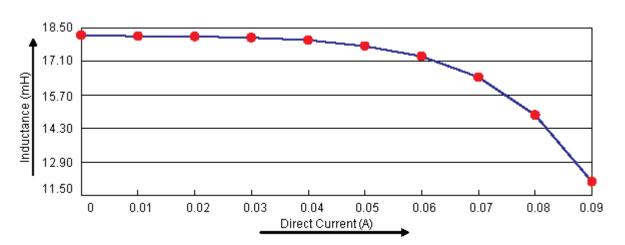


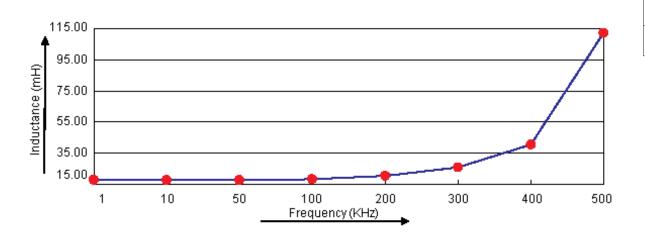
PART NO.

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#### **Electric Characteristics**





#### Test Data for Electrical

Test Item	L mH	DCR Ω	ΔΤ
Condition	100KHz 0.25V	at 25°C	100KHz 0.25V I <sub>rms</sub> = 0.05A
Specification	18 ±10%	72 (Maximum)	Temperature Rise 40°C (Maximum)
1	18.11	60.5	ОК
2	18.2	60.85	ОК
3	17.97	60.96	ОК
4	17.99	61.1	ОК
5	17.95	60.91	ОК
Average	18.04	60.86	ок

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APPROVED BY:	DATE:
Farnell	23/02/11

I DD AVAUNO TITLE

DRAWI	NG IIILE:							
Inducto			or					
SIZE A	DWG NO.		M10003017	l -	TRONIC FIL D75-183KL			REV A
SCAL	F: NTS		II O M · mm		SHEET:	2	OF	= 3



PART NO.

### MCSD75-183KU

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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	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
	Inductance change : Within ±20%	condition after the removal from the test chamber.
Solderability	All termination shall exhibit a continuous sold coating free from defects for a minimum of 90 of the surface area of any individual lead.	Steam ading direction . 8 hours

### **Material List**

No.	Item	Material Description
1	Core	R5A CDR7.8 x 5 (ST) B2.9 F2.5
2	Wire	Ø0.06mm x 1P 2UEWF 155°C
3	Solder (Lead Free)	Sn99.3% / Cu0.7%
4	Glue	TH320

### **Part Number Table**

Description	Part Number
Inductor, 18MH, 10%, SMD	MCSD75-183KU

http://www.farnell.com

http://www.newark.com

http://www.cpc.co.uk

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	APPROVED BY:	DATE:
	Farnell	23/02/11

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DRAW	NG IIILE:						
Inductor							
SIZE <b>A</b>	DWG NO.	M10003017	l -	TRONIC FII <b>075-183K</b> l			REV A
SCAL	E: NTS	U.O.M.: mm		SHEET:	3	OF	3