

RoHS  
Compliant



## Specifications:

Inductance	: 47 $\mu$ H
Inductance Tolerance	: $\pm$ 10%
DC Resistance Max	: 0.6 $\Omega$
DC Current Rating	: 600mA
Self Resonant Frequency	: 14MHz
Inductor Case Style	: SMD
No. of Pins	: 2
Lead Spacing	: 2mm
Core Material	: Ferrite
External Depth	: 4.8mm
External Length / Height	: 3mm
External Width	: 5mm
Resonant Frequency	: 1kHz
Series	: SDC503

## Electrical Characteristics (at 25°C)

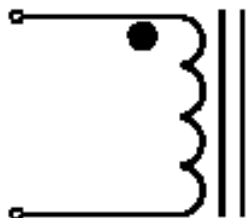
1kHz 1V	L	47 $\mu$ H $\pm$ 10%
at 25°C	DCR	0.6 $\Omega$ (Max.)
1kHz 1V I <sub>rms</sub> = 0.6A	$\Delta$ T	Temperature Rise 40°C (Max.)

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

## Material List

No.	Item	Material Description
1	Core	K22 DRM 5.6 $\times$ 3.6 RB-R B2.2 F1.5
2	Wire	$\varnothing$ 0.15mm $\times$ 1P 2UEF1/U 155°C
3	Solder (Lead Free)	Sn99.3%/Cu0.7%

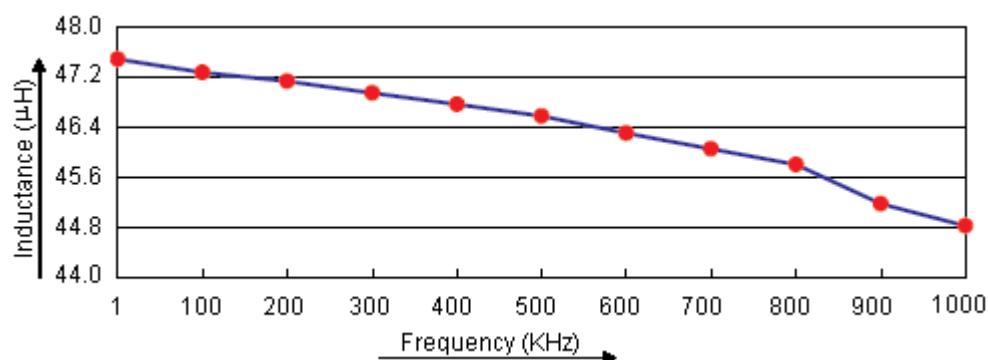
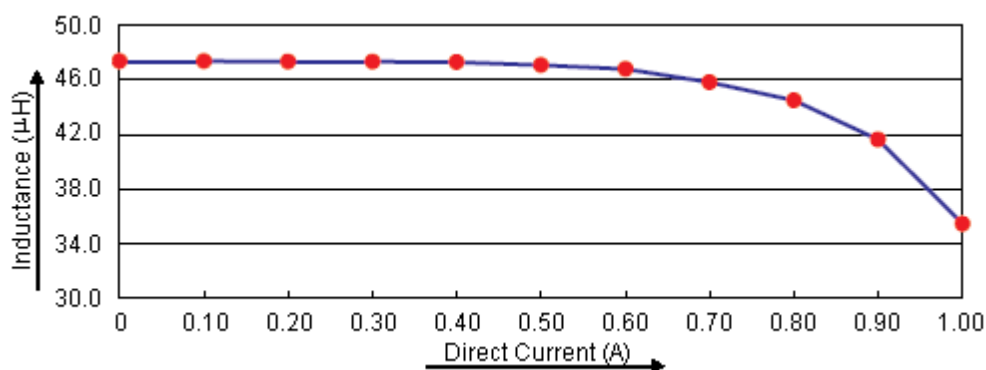
## Schematic Diagram



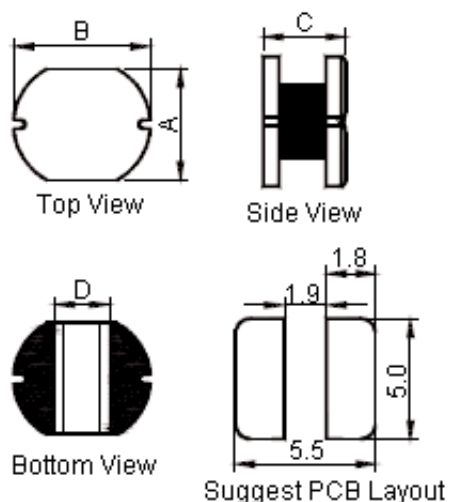
### Note:

1. Wire  $\varnothing 0.15\text{mm} \times 1\text{P 2UEF1/U } 155^{\circ}\text{C}$
2. 42.5TS (Reference)

## Electric Characteristics



## Configurations and Dimensions



A	4.8 ±0.5mm	-
B	5 ±0.3mm	-
C	3 ±0.3mm	-
D	2mm	(Reference)

Dimensions : Millimetres

## Part Number Table

Description	Part Number
Inductor, 47μH, 10%, SMD	MCSDC0503-470KU

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