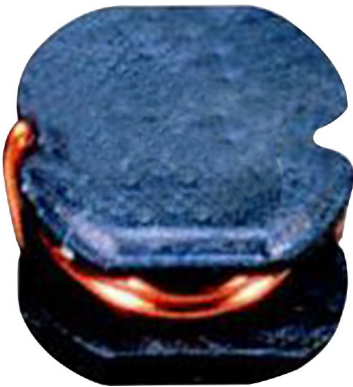


RoHS  
Compliant



### Specifications:

Inductance	: 82 $\mu$ H
Inductance Tolerance	: $\pm$ 10%
DC Resistance Max	: 0.25 $\Omega$
DC Current Rating	: 1A
Inductor Case Style	: SMD
No. of Pins	: 2
Lead Spacing	: 3.5mm
Core Material	: Ferrite
External Depth	: 9mm
External Length / Height	: 5.4mm
External Width	: 10.2mm
Resonant Frequency	: 100kHz
Series	: MCSD105

### Electrical Characteristics (at 25°C)

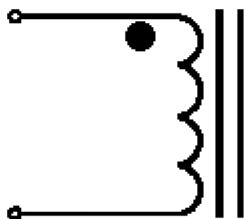
100kHz 0.25V	L	82 $\mu$ H $\pm$ 10%
at 25°C	DCR	0.25 $\Omega$ (Max.)
100kHz 0.25V I <sub>rms</sub> = 1A	$\Delta$ T	Temperature Rise 40°C (Max.)

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

### Material List

No.	Item	Material Description
1	Core	R5A CDR10 $\times$ 5.4 (ST) B3.8 F2.6
2	Wire	$\varnothing$ 0.35mm $\times$ 1P 2UEWF 155°C
3	Solder (Lead Free)	Sn99.3%/Cu0.7%

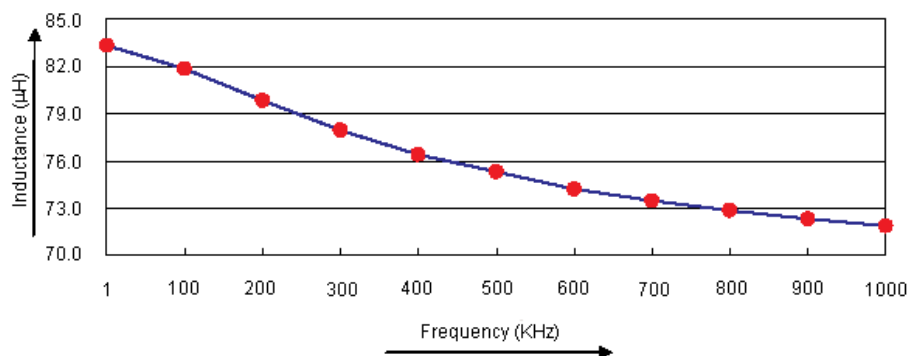
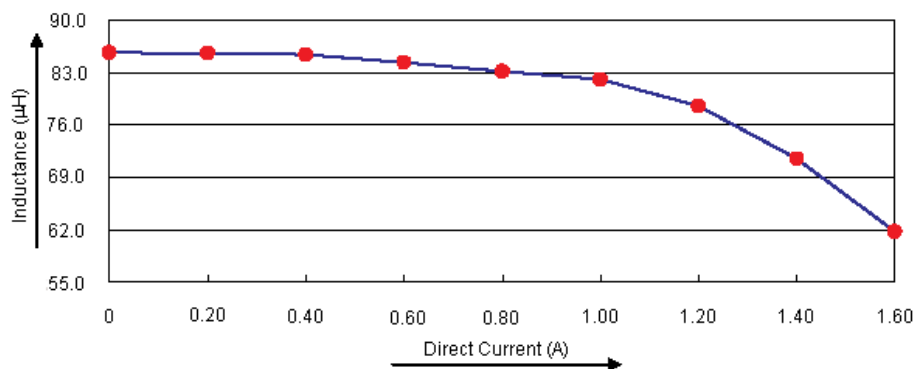
## Schematic Diagram



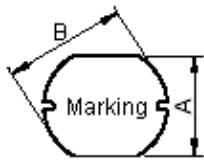
### Note:

1. Wire  $\varnothing 0.35\text{mm} \times 1\text{P 2UEWF } 155^\circ\text{C}$
2. 39.5TS (Reference)

## Electric Characteristics



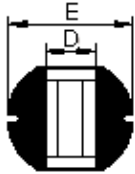
## Configurations and Dimensions



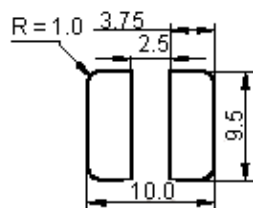
Top View



Side View



Bottom View



Suggest PCB Layout

A	9 ±0.4mm	-
B	10 ±0.4mm	-
C	5.4 ±0.5mm	-
D	3.5mm	(Reference)
E	10.2 ±0.5mm	-

Dimensions : Millimetres

## Part Number Table

Description	Part Number
Inductor, 82µH, 1A, ±10%	MCSD105-820KU

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