

RoHS
Compliant



Specifications:

Inductance	: 18 μ H
Inductance Tolerance	: \pm 20%
DC Resistance Max	: 0.1 Ω
DC Current Rating	: 1.6A
Self Resonant Frequency	: 15MHz
Inductor Case Style	: SMD
No. of Pins	: 2
Lead Spacing	: 2.6mm
Core Material	: Ferrite
External Depth	: 7.8mm
External Length / Height	: 5.3mm
External Width	: 8mm
Resonant Frequency	: 1kHz
Series	: MCSDC0805

Electrical Characteristics (at 25°C)

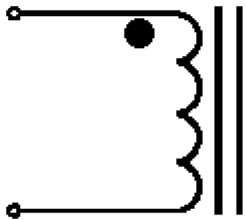
1kHz 1V	L	18 μ H \pm 20%
at 25°C	DCR	100m Ω (Max.)
1kHz 1V I _{sat} = 2.6A	L at I _{sat}	L drops 35% (Maximum)
1kHz 1V I _{rms} = 1.6A	Δ T	Temperature Rise 40°C (Max.)

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

Material List

No.	Item	Material Description
1	Core	R5A CDR7.5 \times 5 (ST) B3.4 F2.5
2	Wire	\varnothing 0.3mm \times 1P 2UEWF (155°C)
3	Solder (Lead Free)	Sn99.3%/Cu0.7%

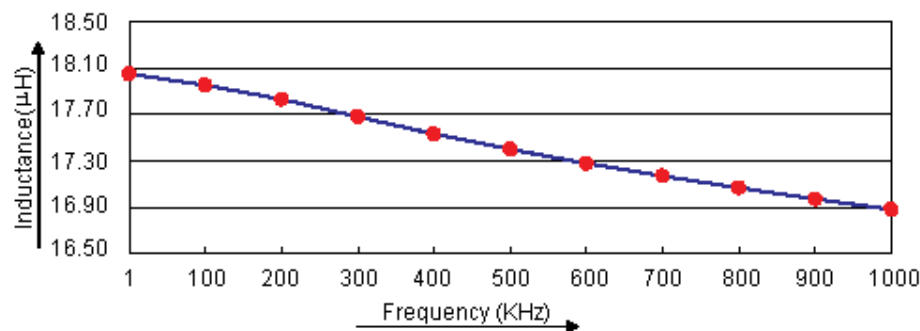
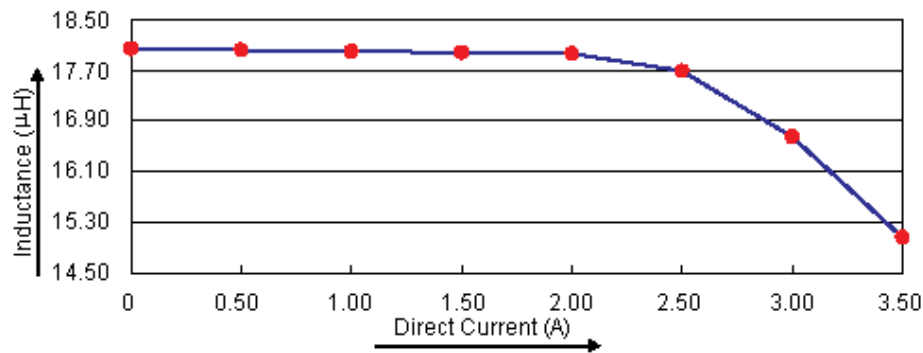
Schematic Diagram



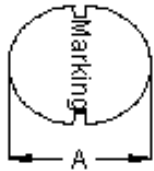
Note:

1. Wire $\varnothing 0.3\text{mm} \times 1\text{P } 2\text{UEWF}155^\circ\text{C}$
2. 21.5TS (Reference)

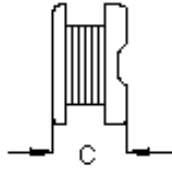
Electric Characteristics



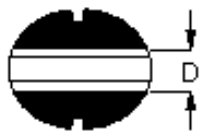
Configurations and Dimensions



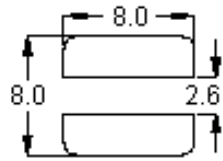
Top View



Side View



Bottom View



Suggest PCB Layout

A	7.8mm	(Maximum)
B	5.3mm	(Maximum)
C	2.6mm	(Reference)

Dimensions : Millimetres

Part Number Table

Description	Part Number
Inductor, 18 μ H, 20%, SMD	MCSDC0805-180MU

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