

**FEATURES:**

- Wireless Charging Coil for Transmitter or Receiver applications, (6.3 $\mu$ H & 24 $\mu$ H options)
- Outline Dimensions: 53mm x 53mm x 5.0mm.
- For Tx or Rx Applications.
- High permeability shielding to protect sensitive electronics
- Durable construction
- RoHS / RoHS II Compliant & Pb free.

**APPLICATIONS:**

- Automotive Industry (in car charging)
- Batteries and Battery Chargers
- Consumer Electronics
- Smart Watches
- Digital Cameras and Camcorders
- Wireless Charging Stations
- Mobile Phones & Charging Accessories
- Power Supplies
- Power Tool Manufacturers

**Maximum Ratings**

Item	Value
Operating Temperature Range	T=-25° C ~ 85° C, RH $\leq$ 90%.
Storage Temperature Range	-25° C~85° C, 70%RH (Max.)

**Electrical Characteristics**

Part Number	Inductance	DC Resistance	Q	Saturated Current (rms)	Current Rating(rms)	SRF
MCTC53	24 $\mu$ H $\pm$ 10%	72m $\Omega$ $\pm$ 20%	170 $\pm$ 30%	30A	5.7A Typ.	2.8MHz
MCTC53	6.3 $\mu$ H $\pm$ 10%	19m $\Omega$ $\pm$ 20%	66 $\pm$ 30%	40A	11A Typ.	6.4MHz
Test Condition	100KHz / 1V	20 $\pm$ 15° C	100KHz/1V	100KHz/1V	$\Delta$ T = 40 K	
Test Environment	Ambient Temperature: 20 $\pm$ 15° C, RH:65% $\pm$ 20%.					

**Test Conditions**

Ambient Temperature: 20 $\pm$ 15° C, RH: 65%  $\pm$ 20%.

If any doubt on the results, measurements/tests should be made within the following limits:

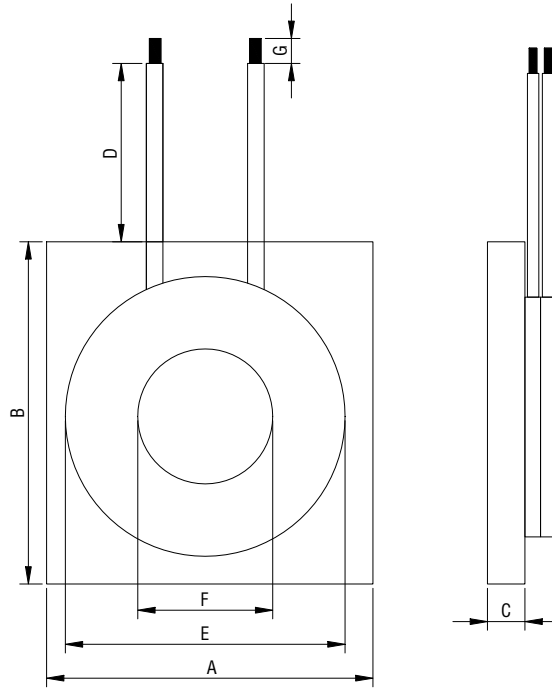
Ambient Temperature: 20 $\pm$ 2° C, RH: 65% $\pm$ 5%

**STORAGE AND OPERATIONAL CONDITION:**
**Storage condition**

- ❖ Recommended storage conditions: -25° C~85° C, 70%RH (Max.)
- ❖ Service life: Within the limits of six month from being produced.
- ❖ The appearance and solder ability should be check, if product is not in expiry date.

**Operation Conditions**

Use condition limit: T=-25° C ~ 85° C, RH $\leq$  90%.

**DIMENSIONS:**


Nominal Code	Number of Coils	Wire	Number of turns	Inductance
C01	1	φ 0.08×105	20	24μH±10%
C02	1	φ 0.08×105	10	6.3μH±10%

**WINDING Specifications:**

Part.Numbe	A	B	C	D	E	F	G
MCCT53	53±1	53±1	5.0±0.5	50±3	44MAX	20.5±0.5	5.0±2.0

- ❖ Wave Soldering Profile: Not suitable for wave soldering
- ❖ Manual Soldering: 350°C Max, 3secs
- ❖ Packaging: Box, 100pcs MOQ