

FEATURES:

- Wireless Charging Coil for Transmitter or Receiver applications,(6.3μH & 24μH options)
- Outline Dimensions: 50mm x 50mm,.height options 3.5mm,4.0mm or 5.0mm.
- For Tx or Rx Applications.
- High permeability shielding to protect sensitive electronics
- Durable construction
- RoHS /RoHS II Compliant & Pb free.
- Consumer Electronics

Maximum Ratings

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

APPLICATIONS:

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

Electrical Characteristics

art Number	Inductance	DC Resistance	Q	Saturated Current (rms)	Current Rating(rms)	SRF
MCTC50A01	24μH ±10%	72mΩ±20%	160±30%	24AA	5.4A Typ.	3.0MHz
MCTC50A02	6.3μH ±10%	19mΩ±20%	72±30%	36A	10.6A Typ.	6.4MHz
MCTC50A03	24μH ±10%	72mΩ±20%	165±30%	27A	5.7A Typ.	2.9MHz
MCTC50A04	6.3μH ±10%	19mΩ±20%	72±30%	40A	11.1A Typ.	5.7MHz
MCTC50A05	24μH ±10%	72mΩ±20%	163±30%	30A	5.7A Typ.	2.8MHz
MCTC50A06	6.3μH ±10%	19mΩ±20%	75±30%	40A	10.6A Typ.	5.7MHz
Test Condition	100KHz / 1V	20±15°C	100KHz/1V	100KHz/1V	ΔT = 40 K	
Test Environment	Ambient Temperature: 20±15° C, RH:65%±20%.					

Test Conditions

Ambient Temperature: $20 \pm 15^{\circ}\text{C}$, RH: $65\% \pm 20\%$. If

any doubt on the results, measurements/tests

should be made within the following limits:

Ambient Temperature: $20 \pm 2^{\circ}\text{C}$, RH: $65\% \pm 5\%$

STORAGE AND OPERATIONAL CONDITION:

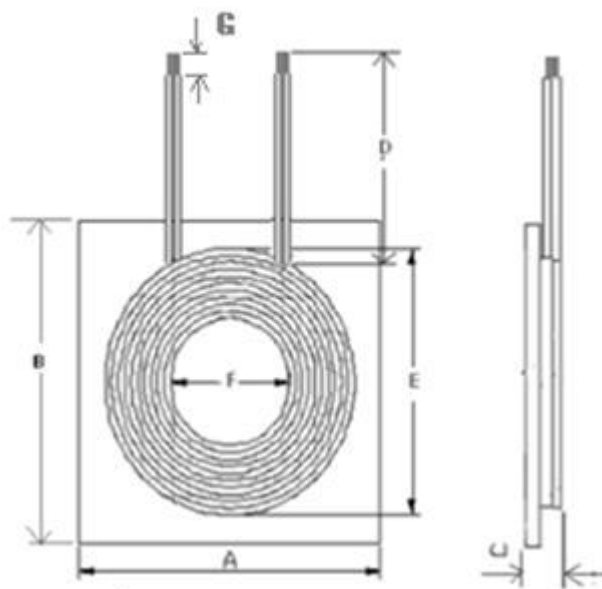
Storage condition

- ❖ Recommended storage conditions: $-25^{\circ}\text{C} \sim 85^{\circ}\text{C}$, 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: $T = -25^{\circ}\text{C} \sim 85^{\circ}\text{C}$, $\text{RH} \leq 90\%$.

DIMENSIONS:



Part.Number	A	B	C	D	E	F	G
MCCT50A01/02	50 ± 1	50 ± 1	3.5 ± 0.5	50 ± 3	44MAX	20.5 ± 0.5	5.0 ± 2.0
MCCT50A03/04	50 ± 1	50 ± 1	4.0 ± 0.5	50 ± 3	44MAX	20.5 ± 0.5	5.0 ± 2.0
MCCT50A05/06	50 ± 1	50 ± 1	5.0 ± 0.5	50 ± 3	44MAX	20.5 ± 0.5	5.0 ± 2.0

WINDING Specifications:

Nominal Code	Number of Coils	Wire	Number of turns	Inductance
A01/03/05	1	0.08×105	20	$24\mu\text{H} \pm 10\%$
A02/04/06	1	$0.08 \times 105 \times 2\text{P}$	10	$6.3\mu\text{H} \pm 10\%$

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