20W Wireless Charging Receiver Coil



AWCCA-RX404012-102



40.0 x 40.0 x 1.20mm RoHS/RoHS II Compliant MSL = 1

Features

- Ideal for 20W applications
- Dimensions: 40.0 x 40.0 x 1.2mm
- Compact and very thin design
- High permeability shielding to protect sensitive electronics
- Very high-power density / low DCR

Applications

- Batteries and battery chargers
- Charging accessories and fast chargers
- Portable electronics
- Roamable electronics
- Drones and robotics
- IoT and industrial IoT
- Power tools
- AR / VR
- Wearables

Maximum Ratings

Item	Value
Operating Temperature Range	$T = -25^{\circ}\text{C} \sim 85^{\circ}\text{C},$ RH 65±20%
Storage Temperature Range	T = -40°C~85°C, RH 65±20%

Electrical Specifications

Part Number	Inductance	DC Resistance	Q	
AWCCA-RX404012-102	8.0μH±10%	80mΩ Max	30 Тур	
Test Condition	125KHz / 1V	20±15°C	125KHz/1V	
Test Environment	Temperature: 20±15°C, RH: 65% ±20%. Equipment: HP4284A, HP42841A, Agilent 34420A or equivalent			

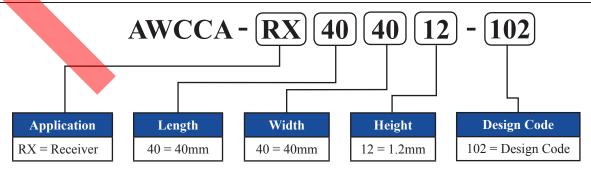
Test Conditions

Ambient Temperature: $20\pm15^{\circ}$ C, RH: $65\%\pm20\%$.

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

Ambient Temperature: 25±5°C, RH: 75%±10%

Part Identification





5101 Hidden Creek Ln Spicewood TX 78669 Phone: 512-371-6159 | Fax: 512-351-8858 For terms and conditions of sales, please visit: www.abracon.com

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ABRACON IS ISO9001-2015 CERTIFIED

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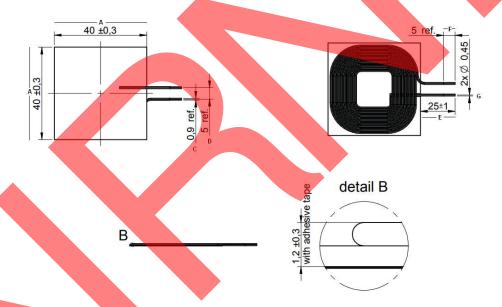


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Product Image



Mechanical Dimensions (Unit: mm)



Dimensions of AWCCA-RX404012-102

Item	A	В	C	D	E	F	G
Spec	40.00	1.20	0.90	5.00	25.00	5.00	0.45 x2
Tol	±0.30	±0.30	REF	REF	±1.0	REF	Ø

Winding Details of AWCCA-RX404012-102

Number of Coils	Wire	Number of Turns	Inductance
1	Litz wire	9 Turns, 1 Layer	8μH±10%
Magnetic Sheet		Format	
Soft Ferrite		1 layer / 40.0mm x 40.0 mm	



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Soldering Information

Wave Soldering Profile:

Not suitable for wave soldering

Manual Soldering:

350°C Max, 3secs

Packaging

Qty per Tray: 300pcs Qty Trays per Carton: 4 Qty per Carton: 1200pcs Weight per Tray: 10Kg

- Dimension of Carton: 41.5 * 30.0 * 30.0cm

Storage and Operational Condition

Storage Conditions:

- Recommended storage conditions: -40°C~85°C, RH 65±20%
- Service life: 12 Month @40°C, RH 40 ~ 65%.
- The appearance and solder ability should be check, if product is not in expiry date.

Operation Conditions:

- Use condition limit; $T = -25^{\circ}\text{C} \sim 85^{\circ}\text{C}$, RH 65 $\pm 20\%$.

