15-20W Wireless Charging Receiver Coil



AWCCA-RX514012-F003



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

Features

- Ideal for 15-20W applications
- Dimensions: 51.0 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°C ~ 85°C, RH 65±20%
Storage Temperature Range	T = -40°C~85°C, RH 65±20%

Electrical Specifications

Part Number	Inductance	DC Resistance	Q				
AWCCA-RX514012-F003	8.5μH±10%	160mΩ Max	25 Тур				
Test Condition	100KHz / 1V	100KHz / 1V	125KHz/1V				
Test Environment	Temperature: 20±10°C, RH: 65% ±20%. Equipment: LCZ METER 1062B, LCZ METER 502						

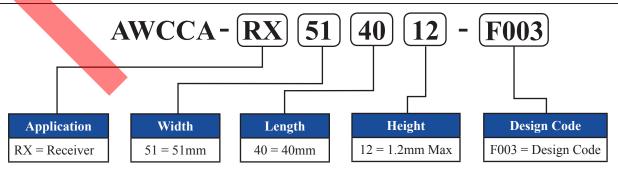
Test Conditions

Ambient Temperature: 20±15°C, RH: 65% ±20%.

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

REVISED: 03-15-19

ABRACON IS ISO9001-2015 CERTIFIED

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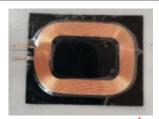


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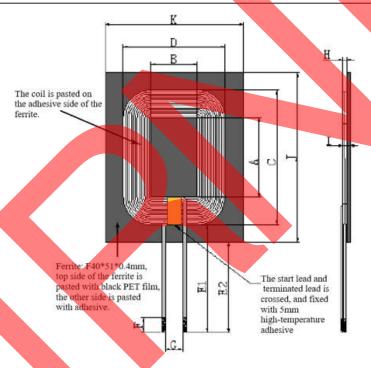


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Product Image



Mechanical Dimensions (Unit: mm)



Dimensions of AWCCA-RX514012-F003

Item	A	В	C	D	E1	E2	F	G	Н	I	J	K
Spec	29.4	19.5	43.0	32.5	8.0	5.0	2-4	6.0	0.40	1.2	51.0	40.0
Tol	±0.30	±0.30	±1.0	±1.0	Ref	±2.0	-	Ref	Max	Max	±1.0	±1.0

Winding Details of AWCCA-RX514012-F003

Number of Coils	Wire	Number of Turns	Inductance
	02RS-N 0.30Gx2P	10 Turns, 1 Layer, CCW	8.5μH±10%
1	Wire Material: Copper	Lead-Free	
	Ferrite	F40*51*0.4mm Ferrite	



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Soldering Information

Wave Soldering Profile:

Not suitable for wave soldering

Manual Soldering:

350°C Max, 3secs

Packaging

Qty per Tray: 360pcs Qty Trays per box: 10

Dimension of each tray: 360*360*15mmDimension of each box: 390*390*180mm

- MOQ: 2000 pcs

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 $\pm 20\%$.

