# **Wireless Charging Coil Assembly**

#### **AWCCA-38R32 Series**





## Moisture Sensitivity Level (MSL) - MSL = 1

### **FEATURES:**

- Wireless Charging Receiver single Coil (11.1µH)
- Outline Dimensions: 38.5mm x 32.5mm x 1.0mm
- For Rx applications
- High permeability shielding to protect sensitive electronics
- Durable construction
- RoHS / RoHS II Compliant & Pb free.

#### > APPLICATIONS:

- Batteries and Battery Chargers
- Consumer Electronics
- Smart Watches
- Digital Cameras and Camcorders
- Wireless Charging Stations
- Mobile Phones & Charging Accessories
- Power Supplies
- Power Tool Manufacturers

## STANDARD SPECIFICATIONS

## **Maximum Ratings**

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

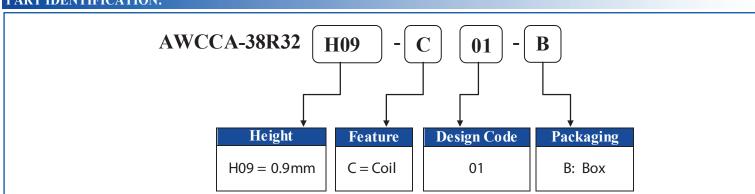
#### **Electrical Characteristics**

Part Number	Inductance	Q-Factor	Current Rating (rms)	Saturated Current (rms)	DC Resistance	SRF
AWCCA - 38R32H09 -C01-B	11.1μH ±10%	22±30%	2.1A Typ.	12A	260mΩ ±20%	11MHz
Test Condition	100KH z / 1V	100KHz/1V	ΔT = 40 K	100KHz/1V	20±15℃	
Test Environment	Ambient Temperature: 20±15°C, RH:65%±20%.					

#### **Test Conditions**

- A) 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:  $20\pm2^{\circ}$ C, RH:  $65\%\pm5\%$
- B) Isat: DC current at which the inductance drops approximate 5% from its value without current

#### **PART IDENTIFICATION:**





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ABRACON IS ISO9001-2015 CERTIFIED

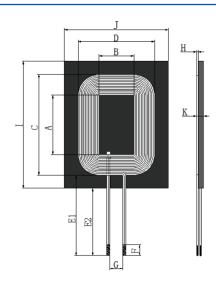
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### **OUTLINE DIMENSIONS:**



A	В	C	D	E1	<b>E2</b>	F	G	Н	I	J	K
17.5 ± 0.5	12.6 ± 0.5	35.3 ± 1.5	30.2 ± 1.5	53.0 Ref	50.0 ± 3.0	2.0 ± 1.0	5.0 Ref	0.38 ± 0.10	39.0 Max	33.0 Max	1.30 Max

## **Winding Specifications**

Number of Coils Wire		Number of Turns	Inductance	
1	φ 0.25×2	14 REF	11.1μH ±10%	

#### **Product Customization**

Products can be customized according to the Wireless Charging Coil Standards or to customer requirements. Please refer to the following table for the feature ranges, and contact ABRACON or authorized distributor / agent for further details.

Inductance Range	DC Resistance Range	Dimension Range	Thickness range
[μH]	[mΩ]	[mm]	[mm]
1 ~ 100	10 ~ 1000	10 ~ 200	0.4 ~ 10

#### Manual Soldering: 350°C Max, 3secs

## **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≤ 90%.

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