# Wireless Charging Coil Assembly

## AWCCA-48R32 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

(Pb)

- Consumer Electronics
- Smart Watches
- Digital Cameras and Camcorders
- Wireless Charging Stations
- Mobile Phones & Charging Accessories

**RoHS / RoHS II Compliant** 

- Power Supplies
- Power Tool Manufacturers

#### **STANDARD SPECIFICATIONS**

<b>Maximum</b> ]	Ratings
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Item	Value			
Operating Temperature Range (including self-temp rise)	$T=-40^{\circ}C\sim 85^{\circ}C$			
Storage Temperature (Packaging)	<40°C 60%RH (Max.)			

### **Electrical Characteristics**

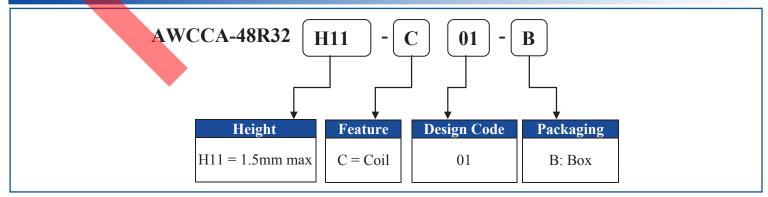
Part Number	Inductance	Q-Factor	Current Rating (rms)	DC Resistance
AWCCA- 48R32H11 -C01-B	10.5µH±10%	23 min.	<b>2.6</b> A Typ.	160mΩ±20%
Test Condition		100KH	Iz / 1V	

#### **Test Conditions**

A) If any doubt on the results, measurements/tests should be made within the following limits: Ambient Temperature: 20±2°C, RH: 65%±5%

B) Irms: Base on temperature rise by 40°C Typ.

#### **PART IDENTIFICATION:**



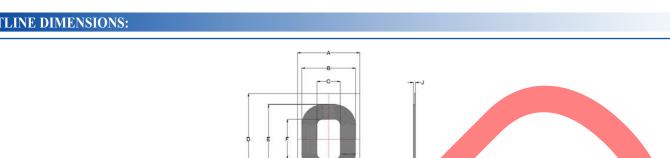


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## **OUTLINE DIMENSIONS:**



(Pb)

**RoHS / RoHS II Compliant** 

Α	В	С	D	E	F	G	H	J
32.0±0.5	28.0±1.5	12.0±1.0	48.0±0.5	37.0±1.5	21.0±1.0	50.0±2.0	10.0±2	1.5 Max

Winding Specifications

		Number of Turns	Inductance
1	φ0.30 x 2	13	$10.5 \mu H \pm 10\%$

#### **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 [mΩ]	Dimension Range [mm]	Thickness range [mm]
1~100	10~1000	$10 \sim 200$	0.4 ~ 10

## Manual Soldering: 350°C Max, 3secs

#### **Storage condition**

- Recommended storage conditions: -40°C~85°C, 70%RH (Max.)
- Recommended storage conditions (with packaging): <40°C, 60%RH

#### **Operation Conditions**

- Use condition limit:  $T=-40^{\circ}C \sim +85^{\circ}C$ , (including self-temperature rise).

ATTENTION: Abracon LLC's products are COTS - Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependent Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon LLC is required. Please contact Abracon LLC for more information.



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**Dimensions:** mm