# 20W Wireless Charging Transmitter Triple Coils



### AWCCA-TX1005545-F002



100.0 x 55.0 x 4.5 mm RoHS/RoHS II Compliant MSL = 1

#### **Features**

- Ideal for 20W applications
- Outline Dimensions: 100.0 x 55.0 x 4.5mm
- High permeability shielding to protect sensitive electronics
- Very high-power density
- Low DCR / very high inductance

# **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%

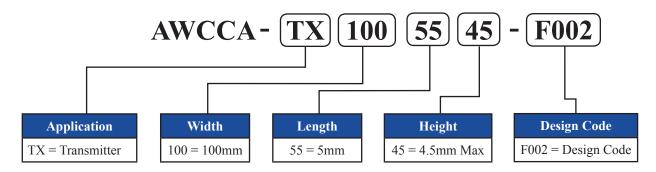
### **Electrical Specifications**

Part Number	Coil	Inductance	DC Resistance	Q	
	L1	12.5μH±10%	<75mΩ Max		
AWCCA-TX1005545-F002	L2	12.5μH±10%	<75mΩ Max	90 Ref	
	L3	11.5μH±10%	<75mΩ Max		
Test Condition		100KHz / 1V	20±15°C	100KHz / 1V	
Test Environment	Temperature: 25±10°C, RH: 65% ±20%. Equipment: LCZ METER 1062B, LCZ METER 502				

#### **Test Conditions**

Ambient Temperature: 20±10°C, RH: 65% ±20%.

#### 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

# **20W Wireless Charging Transmitter Triple Coils**

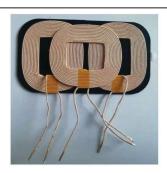


# AWCCA-TX1005545-F002

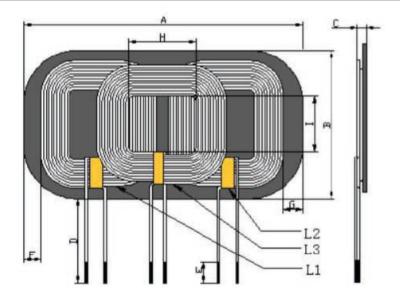


100.0 x 55.0 x 4.5 mm RoHS/RoHS II Compliant MSL = 1

# **Product Image**



#### **Mechanical Dimensions (Unit: mm)**



### Dimensions of AWCCA-TX1005545-F002

Item	A	В	C	D	E	F	G	H	I
Spec	100.0	55.0	4.5	50.0	2-5	3.0	3.0	27.5	19.5
Tol	±1.5	±1.0	Max	±3.0	-	Ref	Ref	±0.5	±0.5

#### Winding Details of AWCCA-TX1005545-F002

Number of Coils	nber of Coils Wire Number of Turns		Inductance
3	0.08*105P copper wire covered with silk		L1: 12.5μH±10%
		12 Turns, 1 Layer	L2: 12.5μH±10%
			L3: 11.5µH±10%

Yellow areas: 8mm (ref) high temperature adhesive tape wrapped around the outlet 1.5Ts; The start lead and terminated lead is crossed and fixed with 8mm high-temperature adhesive tape.

Ferrite: 55\*100\*1mm, one side of the ferrite is pasted with black PET film, the other side is pasted with adhesive



# 20W Wireless Charging Transmitter Triple Coils



### AWCCA-TX1005545-F002



100.0 x 55.0 x 4.5 mm RoHS/RoHS II Compliant MSL = 1

### **Soldering Information**

#### **Wave Soldering Profile:**

Not suitable for wave soldering

#### **Manual Soldering:**

350°C Max, 3secs

#### **Packaging**

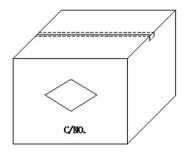
Tray: 112pcs

Outer Packaging: Box, 560pcs, containing 5 Trays

**MOQ:** 1000



Tray



**Outer Packaging** 

Item	Quantity	Dimensions
Tray	112pcs	370*265*55mm
Outer Packaging	560pcs	420*270*310mm

#### **Storage and Operational Condition**

# **Storage Conditions:**

- Recommended storage conditions: -40°C~85°C, RH 65±20%
- Service life: 12 Month @ $40^{\circ}$ C, RH  $40 \sim 65\%$ .

#### **Operation Conditions:**

- Use condition limit: T=-25°C ~ 85°C, RH 65±20%.

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.



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

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

**ABRACON:** 

AWCCA-TX1005545-F002