三维一体接收天线13x11.6x3.20 mmm-3D11
3-Axes Transponders (3DCoils)

RoHS COMPLIANT 2002/95/EC

联磁电子

广东省中山市横栏镇新茂华文学校侧后，电话：18707600755，13726055497 0760-23893373
1043009304@qq.com ,1012592856@qq.com,Web：http://www.ucorezs.com/
http://shop1384448237636.1688.com/

3D11LP SMD 3D Coil 13x11.6x3.20 mm (7.2mH - 2.38mH) Low profile

Small 3D coil version designed to achieve a very good electrical performance in the smallest dimensions.

Keyless entry systems is a typical application for this coil, the isotropy is often sought in RF antenna. In transponder applications,this feature has been achieved by thecombination of 3 single coils oriented in the 3 space axis with the aim of covering the maximum space orientation. This small size 3D coil offers the possibility of assembly in single component 3 coils with full functionality, thus reducing cost, saving PCB space and increasing the circuit reliability.

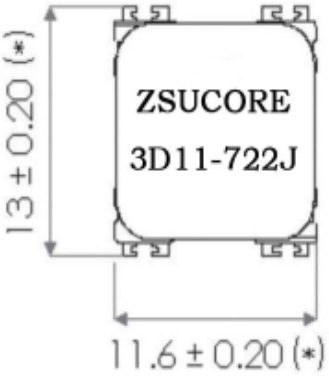
Smallest size 13x11.6x3.20 mm.
Very good electrical performance.
High stability in temperature (-40 ºC to +125 ºC).
The inductivity in each axis can be customized to achieve customer requirements.
Designs at lower frequencies like 20 kHz and 40 kHz show a very good electrical performance as well.
High sensitivity values.
Applications:
Automotive Passive keyless entry systems.
Automotive RTPMS with wake up functions.
Industrial logistics and control.
Access control.
Tracking devices.

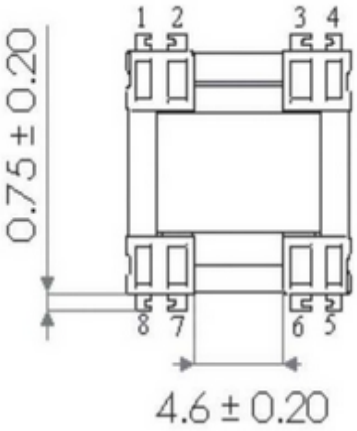
The specification chart is a reference guide for the most common required values at working frequencies of 125 kHz. Any other inductance value at LF or tighter tolerances can be provided. Please contact our sales deparment for any inquiry.

1. Electrical properties

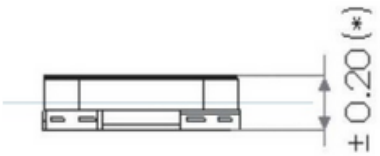
	L (mH)	Tolerance	Q Min	Frequency (khz)	Sensitivity (mVpp/App/m) Min	Length (mm)	Width (mm)	Height (mm)
3D11-0247J	2.47	±5%	17	125	50	13	11.6	3.15
3D11-0345J	3.45	±5%	15	125	55	13	11.6	3.15
3D11-0477J	4.77	±5%	15	125	70	13	11.6	3.15
3D11-0491J	4.91	±5%	18	125	75	13	11.6	3.15
3D11-0720J	7.2	±5%	15	125	85	13	11.6	3.15
3D11-0238J	2.38	±5%	18	125	40	13	11.6	3.15

2.Dimensions

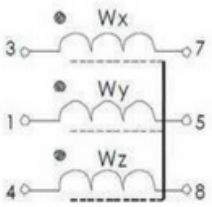




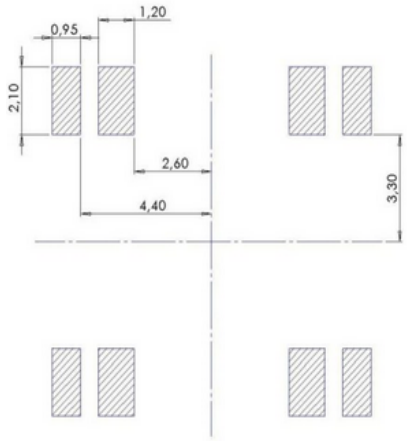
Pins coplanarity: 0.15mm



All dimensions in mm



(2-3 and 6-7 are interconnected)

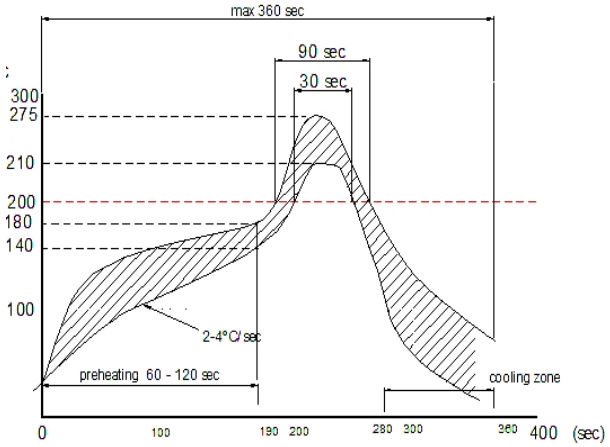


All dimensions in mm

3.Soldering

Recommended reflow profile.

Reflow soldering, vapour-phase soldering. A maximum soldering temperature of 260°C during 10 s should not be exceed for (see recommended soldering profile with maximum and minimum temperature-time).



The reflow condition recommended is according to the machine used by our company. Big differences will arise as a result of the type of machine, reflow conditions, method, etc used.

4.Measurement Conditions

Rated Inductance LR: Measured at frequency fL, with impedance analyser WK3260 with 3MHz installed.
Q Factor Qmin: Measured at frequency fL, with impedance analyser WK3260 with 3MHz installed.
Self-resonance frequency fmin: Measured at frequency fL, with impedance analyser WK3260 with 3MHz installed.
DC resistance Rmax: Measured at 20°C ambient temperature, measuring current <IR.
Sensitivity: Measured with Helmholtz coils 5 turns, 160mm ⌀, + waveform generator Agilent 33120A + oscilloscope Agilent 54622A. Contact ZSUCORE RFID for complete measurement specification.