

3DC11AOI

SMD 3D Coil AOI 12.4x11.4x3.6 mm

Features

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

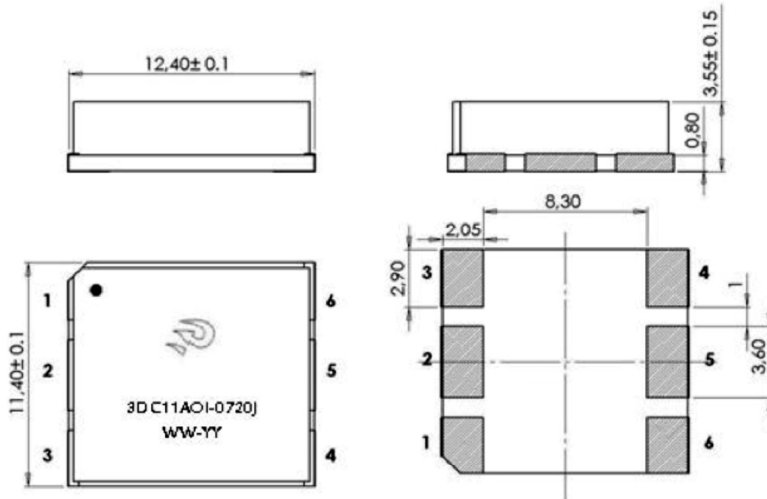
Keyless entry systems is a typical application for this coil, the isotropy is often sought in RF antenna. In transponder applications, this feature has been achieved by a monolithic single core, wound in the 3 space axis with the aim of covering the maximum space orientation. This small size 3D coil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



Characteristics

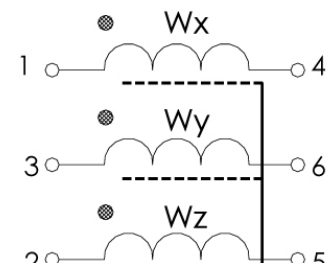
- Smallest size 12,4x11,4x3,6mm.
- Very good electrical performance.
- High stability in temperature (-40 °C to +85 °C).
- The inductivity in each axis can be customized to achieve customer requirements.
- Designs at lower frequencies 20kHz-300kHz show a very good electrical performance.

Dimensions and pad layout



All Dimensions in mm
 Pins Coplanarity 0.10mm
 General Tolerances unless indicated ±0.1mm

Schematic Diagram



Electrical specifications

Code	L _{x,y} (mH)	L _z (mH)	O _{x,y} Min	O _z Min	F (kHz)	SRF _{x,y} (kHz) Min	SRF _z (kHz) Min	DCR _{x,y} (Ω) Max	DCR _z (Ω) Max	Sensitivity _{x,y} (mVpp/ App/m) Min	Sensitivity _z (mVpp/ App/m) Min	Length (mm)	Width (mm)	Height (mm) MAX
3DC11AOI-0720J	7.20	7.20	21	18	125	250	400	110	213	90	77	12.4	11.4	3.60
3DC11AOI-S-2000J	20	15	4.5	4	20	150	300	440	330	20	18	12.4	11.4	3.60