

3DC14AOI

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.

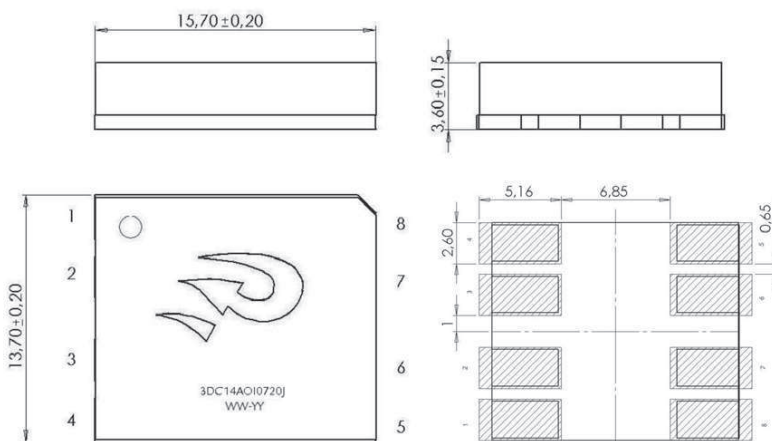
Keyless entry systems is a typical application for this coil, the isotropy is often sought in RF antenna. In transponder applications, this feature has been achieved by the combination of 3 single coils oriented in the 3 space axis with the aim of covering the maximum space orientation. This small size 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.



Characteristics

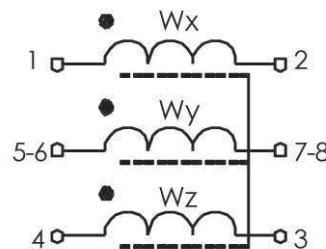
- Smallest size 15.7x13.7x3.6mm.
- Very good electrical performance.
- High stability in temperature (-40 °C to +85 °C).
- The inductivity in each axis can be customized to achieve customer requirements.
- Designs at lower frequencies like 125kHz show a very good electrical performance as well.
- High sensitivity values.
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Dimensions and pad layout



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

Schematic Diagram



Electrical specifications

P/N	L x,y,z (mH)	Q x,y,z Min	Fre- quency (kHz)	Cres (pF)	SRF x,y (kHz) Min	SRF z (kHz) Min	DCR x,y (Ω) Max	DCR z (Ω) Max	Sensitivity x,y,z (mVpp/ App/m) Min	Length (mm)	Width (mm)	Height (mm)
3DC14AOI-0720J	7.20	20	125	500	400	97	248	80	65	15.7	13.7	3.75