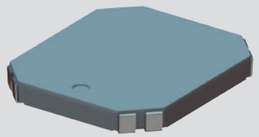
New

3DC14EM-ULP

SMD 3D Coil Ultra-Low-Profile

14x12x1.65mm (2.38-4.5mH(1))

3-AXIS TRANSPONDER INDUCTOR (3DCOILS™)



APPLICATIONS

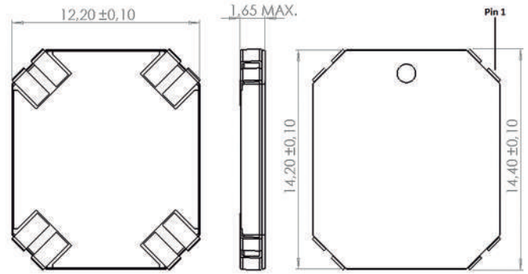
- Smartphones
- Automotive
- Acces Control with low profles devices
- Access control in mobile devices.
- Electro Magnetic Motion Tracking using Smartphones as handles.
- EM Tracking of Smart Phones

01 CHARACTERISTICS

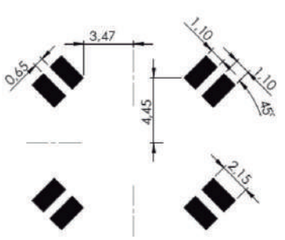
- 3 coils in one component, oriented in the 3 space axes with full functionality
- Ultra-Low profile. Best in market. Suitable for Smartphone.
- Allows Automatic Optical Inspection
- High sensitivity (>45mV/A/m [X,Y]; >50mV/A/m [Z])
- Available with different inductance values
- Very stable electrical properties in full operational operative range (-40°C →+125°C)
- Suitable for Pick&Place SMD assembly

02 SPECIFICATIONS

DIMENSIONS (mm)



RECOMMENDED PAD-LAYOUT



Tolerances unless otherwise specified: ± 0.1mm

ELECTRICAL SPECIFICATIONS | 3DC14EMR-ULP-0238J

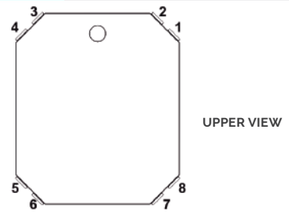
Lx(mH)	2.38-4.5
L,y (mH)	2.38-4.5
Lz (mH)	4.5-9.0
Qx,y min	18
Qz min	20-25
SRFx,y (kHz) Min	350
SRFz (kHz) Min	900
DCRx,y (Ω) Max	180
DCRz (Ω) Max	176
Sensitivity x,y,z (mVpp/App/m) min	40-65
Dimensions (mm) Max	14.4 x 12.2 x 1.65

Other tolerances under request. Inductance tolerance ±5%. Please contact PREMO for any inquiry.

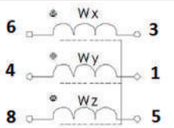
This chart is a reference guide for the most common required values at working frequency of 125kHz.. Please contact our sales department for any inquiry. Sensitivity measured with Helmholtz coils H=8.36 App/m @125kHz. Contact us for measurement specification.

SRF: Self-resonant frequency of the coil

PINS MARKING



ELECTRICAL DIAGRAM



- Start of windings is indicated with the dot