

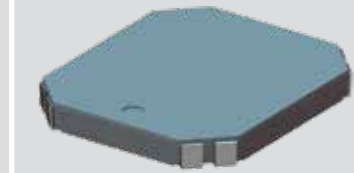
New

## 3DC14EM-ULP

### SMD 3D Coil Ultra-Low-Profile

14.4x12.2x1.65mm (2.38-4,77mH<sup>(1)</sup>)

3-AXIS TRANSPONDER INDUCTOR (3DCOILS™)



#### APPLICATIONS

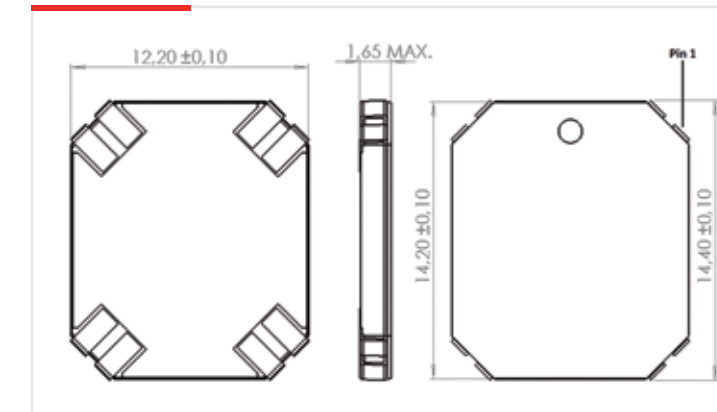
- › Smartphones
- › Automotive
- › Acces Control with low profiles devices
- › Access control in mobile devices.
- › Electro Magnetic Motion Tracking using Smartphones as handles.
- › EM Tracking of Smart Phones

## 01 CHARACTERISTICS

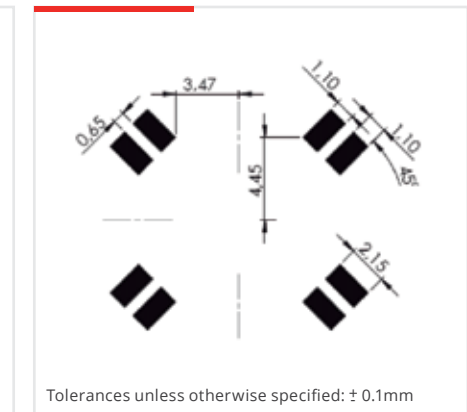
- › 3 coils in one component, oriented in the 3 space axes with full functionality
- › Ultra-Low profile. Best in market. Suitable for Smartphone.
- › Allows Automatic Optical Inspection
- › High sensitivity (>45mV/A/m [X,Y]; >50mV/A/m [Z])
- › Available with different inductance values
- › Very stable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

## 02 SPECIFICATIONS

### DIMENSIONS (mm)



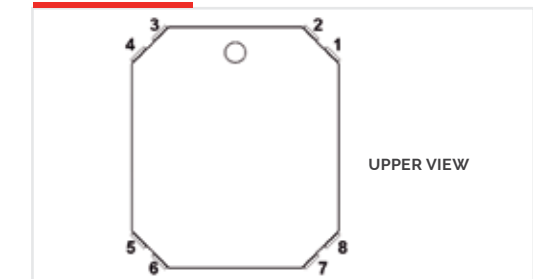
### RECOMMENDED PAD-LAYOUT



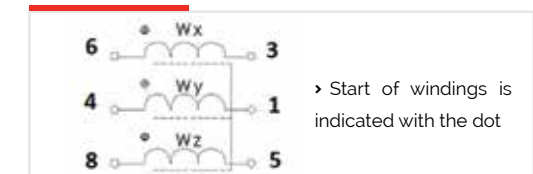
### ELECTRICAL SPECIFICATIONS

	3DC14EM-ULP-0238J	3DC14EM-ULP-0477J
Lx(mH)	2.38	4.77
L,y (mH)	2.38	6.30
Lz (mH)	7.2	10.5
Qx,y min	15	15
Qz min	20	25
SRFx,y (kHz) Min	350	300
SRFz (kHz) Min	900	800
DCRx,y (Ω) Max	88	190
DCRz (Ω) Max	172	260
Sensitivity x,y,z (mVpp/App/m) min	45	80
Dimensions (mm) Max	14.4 x 12.2 x 1.65	14.4 x 12.2 x 1.65

### PINS MARKING



### ELECTRICAL DIAGRAM



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