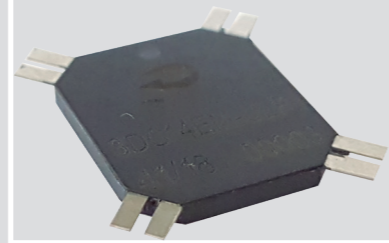


New

3DC14EMR-ULP

SMD 3D Coil Ultra-Low-Profile
14x12x1.65mm (2.38-4.77mH)

3-AXIS TRANSPONDER INDUCTOR (3DCOILS™)



APPLICATIONS

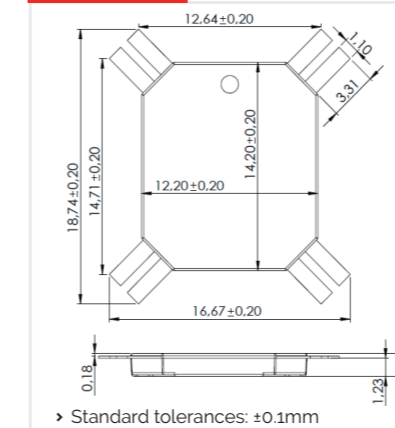
- › Smartphones
- › Automotive
- › Acces Control with low profiles devices
- › Access control in mobile devices.
- › Electro Magnetic Motion Tracking using Smartphones as handles.
- › EM Tracking of Smart Phones

01 CHARACTERISTICS

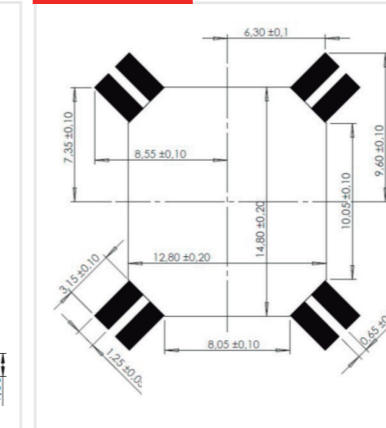
- › 3 coils in one component, oriented in the 3 space axes with full functionality
- › Ultra-Low profile. Best in market. Suitable for Smartphone.
- › Allows Automatic Optical Inspection
- › High sensitivity (>80mV/A/m)
- › Available with different inductance values
- › Very stable electrical properties in full operational operative range (-40°C → +85°C)
- › Suitable for Pick&Place SMD assembly

02 SPECIFICATIONS

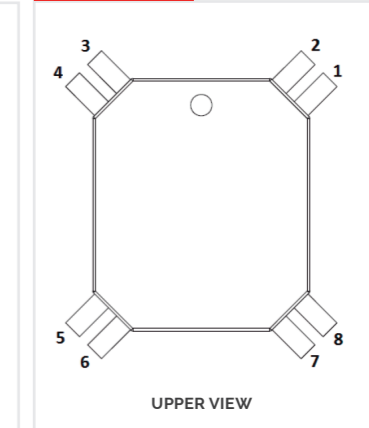
DIMENSIONS (mm)



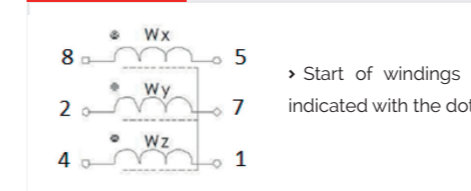
RECOMMENDED PAD-LAYOUT



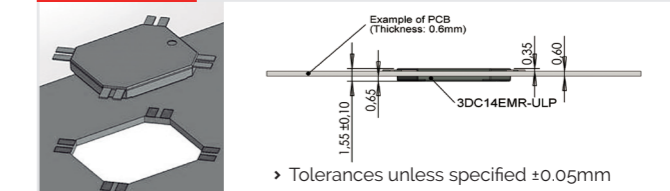
PINS MARKING



ELECTRICAL DIAGRAM



HIDDEN ASSEMBLY EX. OVER 0.6T PCB



ELECTRICAL SPECIFICATIONS

CODE	Lx (mH)	Ly (mH)	Lz (mH)	Qx,y min	Qz min	SRFx,y (kHz) min	SRFz (kHz) min	DCR x,y(Ω) Max	DCR z (Ω) Max	Sensitivity x,y (mVpp/ App/m) min	Sensitivity z (mVpp/ App/m) min	Dimensions (mm) Max
3DC14EMR-ULP-0238J	2.38 ⁽¹⁾	2.38 ⁽¹⁾	7.2 ⁽¹⁾	15	20	350	900	84	172	45	50	14.4 x 12.2 x 1.65 ⁽²⁾
3DC14EMR-ULP-0477J	4.77 ⁽¹⁾	6.30 ⁽¹⁾	10.5 ⁽¹⁾	14.8	25	250	600	190	259	95	80	14.4 x 12.2 x 1.65 ⁽²⁾
3DC14EMR-ULP-0450J	4.50 ⁽¹⁾	4.50 ⁽¹⁾	7.60 ⁽¹⁾	14.8	25	250	600	150	176	90	60	14.4 x 12.2 x 1.65 ⁽²⁾

(1) Other inductances under request. Inductance tolerance ±5%. Please contact PREMO for any inquiry.

(2) Body size without pins.

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