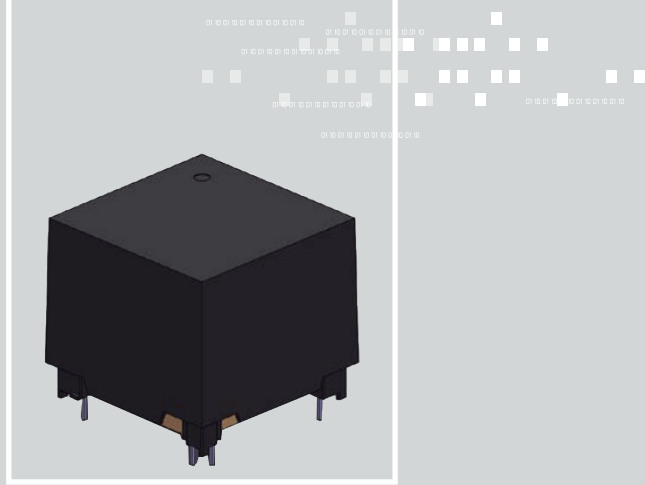


3DCC28

3D Coil Cube emitter for VR magnetic tracking system
39.5x39.5x38.6mm (350-600uH/1.0-3.0mH)

Tx EM MOTION TRACKING ANTENNAS



FEATURES

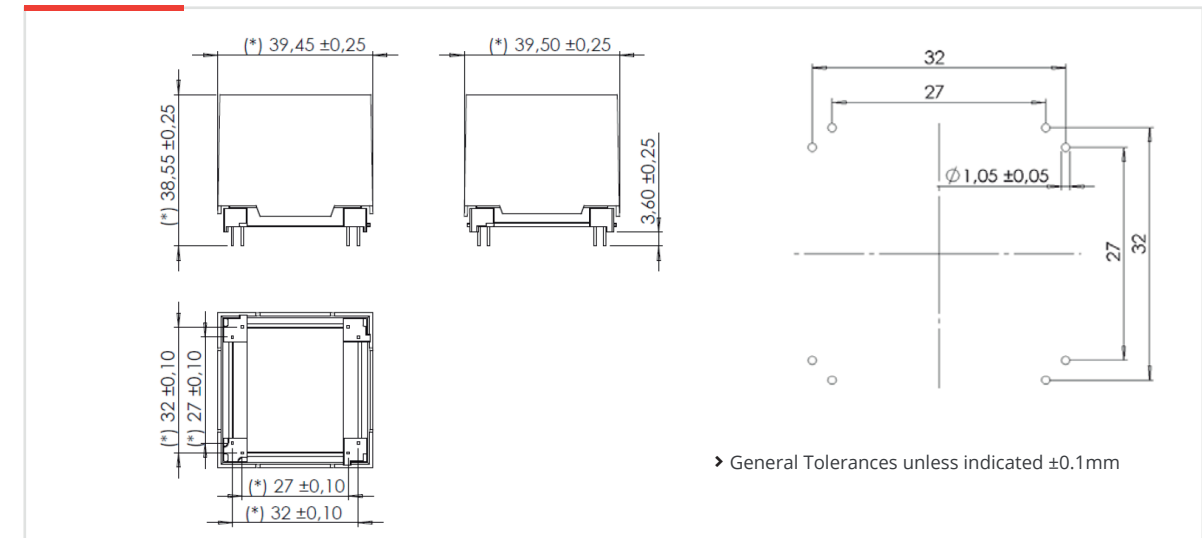
Emitter 3D cubic magnetic antenna for magnetic tracking sensor systems. For VR/AR applications (gaming, etc.) and motion capture applications. Very low latency compared with other motion tracking technologies.

01 CHARACTERISTICS

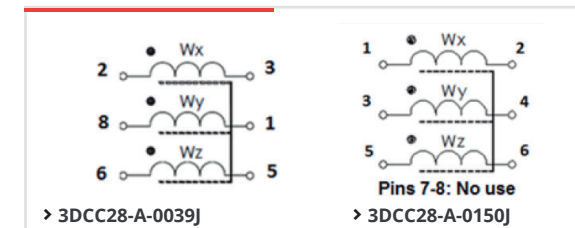
- › High axis symmetry (X,Y,Z), repeatability (very good isotropy) and accuracy (up to 1% tolerances)
- › Magnetic Sensitivity: 60 mVpp / App / m @20kHz. (High inductance)
- › Magnetic Sensitivity: 30 mVpp / App / m @20kHz. (Low inductance)
- › Mechanical Drop and Vibration compliant.
- › -20°C to 85°C Temperature Performance.
- › Mounting method: PTH.
- › Multiple frequencies available (typ 60kHz, 125kHz, 134kHz)
- › According industry and safety standards: UL94-Vo
- › Dimensions: 39.5x39.5x38.6 mm

02 DIMENSIONS

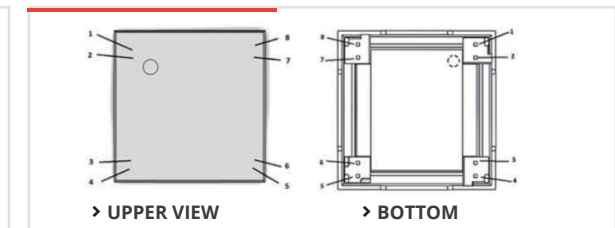
DIMENSIONS AND RECOMMENDED PAD-LAYOUT (mm)



ELECTRICAL DIAGRAM



PINS MARKING



ELECTRICAL SPECIFICATIONS

Code	L _{x,y,z} nom	Q _{x,y,z} nom	f (kHz)	SRF _{x,y} (kHz) Min	SRF _z (kHz) Min	DCR _x (Ohm) Max	DCR _y (Ohm) Max	DCR _z (Ohm) Max	Magnetic Field _{x,y,z} (@1m, 20kHz, 0.25Arms) nom
3DCC28-A-0039J	380 / 375 / 365 µH	31/30/28	20	1500	1500	1.4	1.4	1.4	6.9 nT
3DCC28-A-0150J	1.49 / 1.46 / 1.39 mH	46/46/46	20	200	200	3.0	2.9	3.2	8.9 nT

This chart is a reference guide for the most common required values at working frequency of 20kHz. Any other inductance value at LF or tighter tolerances can be provided. Please contact our sales department for any inquiry. Sensitivity measured with Helmholtz coils H=11.37 App/m @20kHz. Contact us for measurement specification.

SRF: Self-resonant frequency of the coil