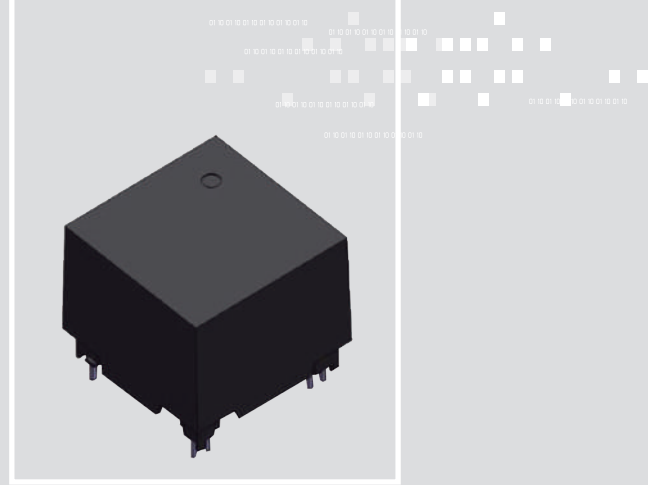


New

## 3DCC20

3D Coil Cube emitter for VR magnetic tracking system  
30.7x30.75x30.7mm (300-600uH/1.0-1.5mH)

Tx EM MOTION TRACKING ANTENNAS



### FEATURES

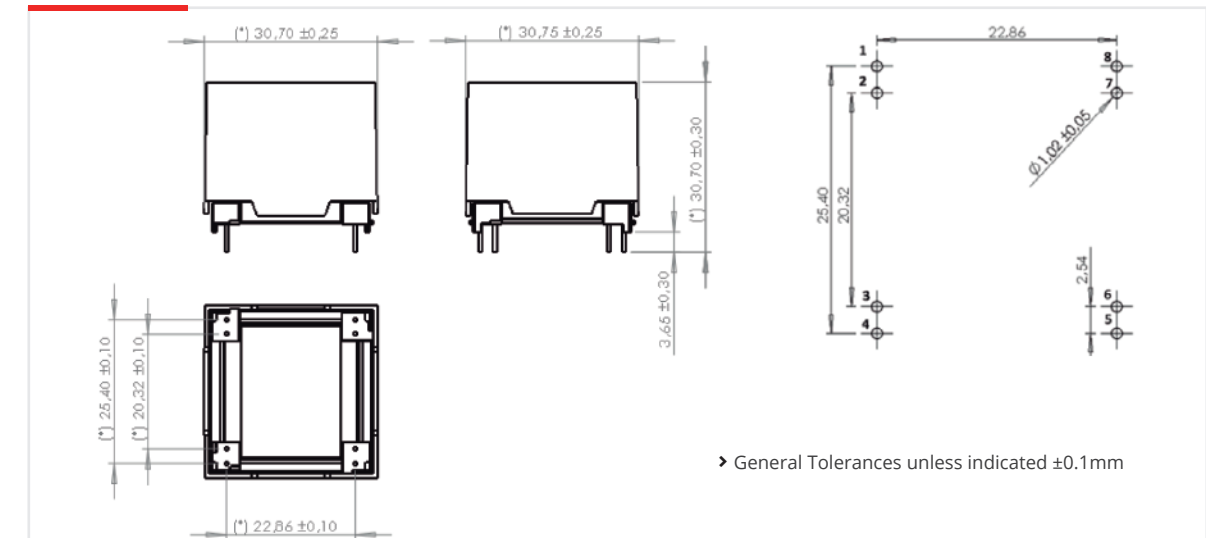
Emitter 3D cubic magnetic antenna for magnetic tracking sensor systems. For VR/AR applications (gaming, etc.) and motion capture applications. Very low latency compared with other motion tracking technologies.

## 01 CHARACTERISTICS

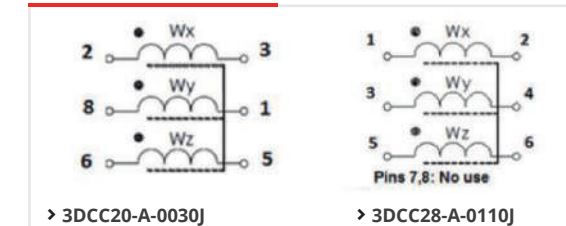
- › Medium size Emitter 3DCoilCube for Magnetic tracking systems for Virtual Reality Systems
- › High axis symmetry (X,Y,Z), repeatability (very good isotropy) and accuracy (up to 1% tolerances)
- › Magnetic Sensitivity: 32 mVpp / App / m @20kHz. (High inductance)
- › Magnetic Sensitivity: 18 mVpp / App / m @20kHz. (Low inductance)
- › Mechanical Drop and Vibration compliant.
- › Mounting method: PTH.
- › -20°C to 85°C Temperature Performance.
- › According industry and safety standards: UL94-V0
- › Dimensions: 30.7x30.75x30.7 mm

## 02 DIMENSIONS

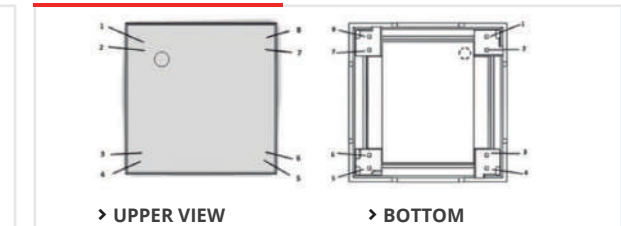
DIMENSIONS AND RECOMMENDED PAD-LAYOUT (mm)



### ELECTRICAL DIAGRAM



### PINS MARKING



### ELECTRICAL SPECIFICATIONS | 20kHz

Code	L <sub>x,y,z</sub> nom	Q <sub>x,y,z</sub> nom	f (kHz)	SRF <sub>x,y,z</sub> (kHz) Min	DCR <sub>x</sub> (Ohm) Max	DCR <sub>y</sub> (Ohm) Max	DCR <sub>z</sub> (Ohm) Max	Magnetic Field <sub>x,y,z</sub> (@1m, 20kHz, 0.25Arms) nom
3DCC20-A-0030J	300 / 295 / 300 μH	15.1/14.3/13.1	20	500	2.6	2.8	2.8	4.4 nT
3DCC20-A-0110J	1.16 / 1.14 / 1.11 mH	26.3/27.8/25.1	20	250	5.1	4.9	5.4	7.0 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