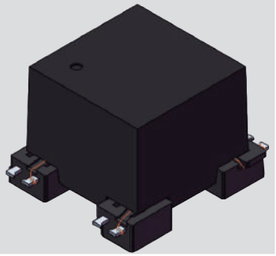
New

3DTX10

3D Coil Cube receiver sensor for VR magnetic tracking system

17.4x15.2x13.9 mm (100-200uH)

Tx EM MOTION TRACKING ANTENNAS



FEATURES

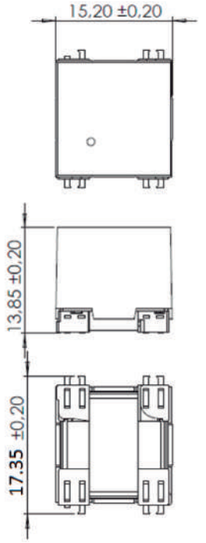
Three axis magnetic antenna for magnetic tracking sensor systems. Very good performance/size ratio, with isotropic response. Used as receiver in VR/AR applications (gaming, etc.) and motion capture applications. Very low latency compared with other motion tracking technologies.

01 CHARACTERISTICS

- High axis symmetry (X,Y,Z), repeatability (very good isotropy) and accuracy (up to 5% tolerances)
- Magnetic Sensitivity: 3.8 mVpp / App / m @20kHz.
- Mechanical Drop & Vibration compliant.
- Mounting method: SMT (Taped & Reeled).
- -20°C to 85°C Temperature Performance.
- Multiple frequencies available (typ 60kHz, 125kHz, 134kHz).
- According industry and safety standards: UL94-V0.

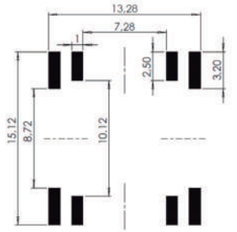
02 DIMENSIONS

DIMENSIONS (mm)

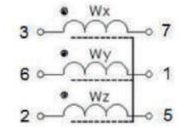


- General Tolerances unless indicated ±0.1mm
- Pins Coplanarity 0.15mm

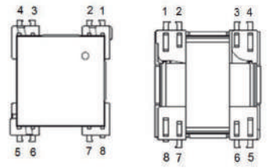
RECOMMENDED PAD LAYOUT



ELECTRICAL DIAGRAM



PINS MARKING



› TOP VIEW › BOTTOM

ELECTRICAL SPECIFICATIONS

Code	Lx,y,z nom (µH)	Qx,y,z min	f (kHz)	SRF x,y,z (MHz) Min	DCRx (Ohm) Max	DCRy (Ohm) Max	DCRz (Ohm) Max	Sensitivity x,y,z (mV/A/m) Min (*)
3DTX10-A-0100J	140 / 140 / 104	2.6/2.6/2.0	20	1	6.7	6.9	6.5	3.5

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