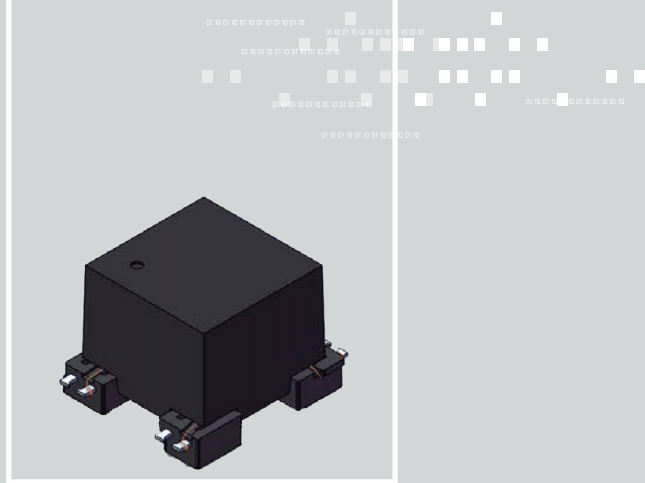


3DCC10

3D Coil Cube receiver sensor for VR magnetic tracking system

17.4x15.2x13.9mm (600-800uH/2-10mH)

Rx EM MOTION TRACKING SENSORS



FEATURES

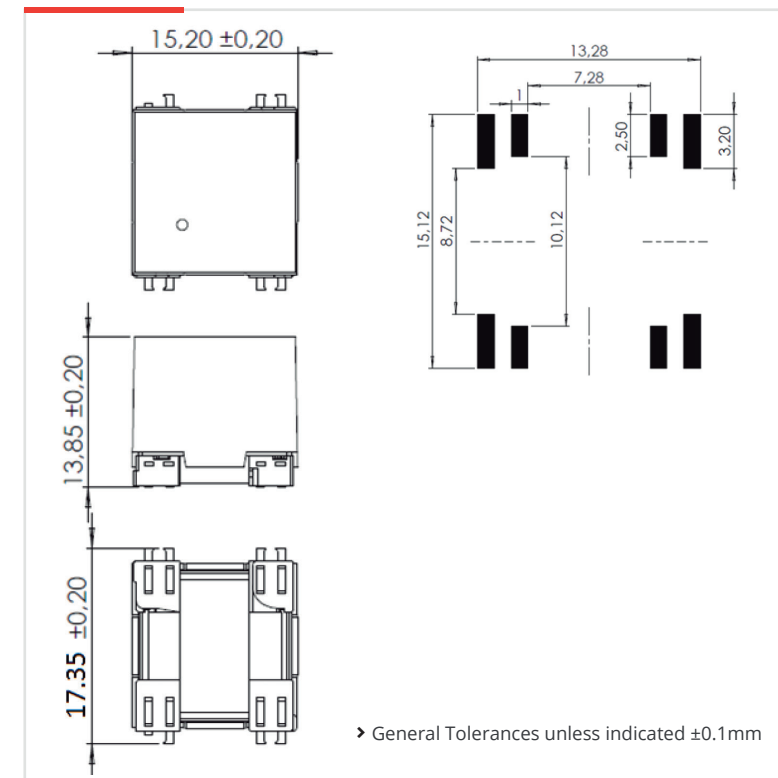
Three axis magnetic sensor for magnetic tracking systems. Very good performance/size ratio, with isotropic response. Used as receiver in VR/AR applications (gaming, etc.) and motion capture applications. Very low latency compared with other motion tracking technologies.

01 CHARACTERISTICS

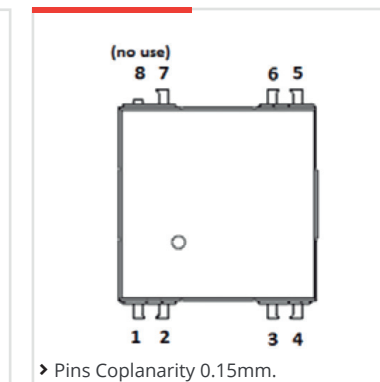
- › High axis symmetry (X,Y,Z), repeatability (very good isotropy) and accuracy (up to 1% tolerances)
- › Magnetic Sensitivity: 25 mVpp / App / m @20kHz. (High inductance)
- › Magnetic Sensitivity: 8.5 mVpp / App / m @20kHz. (Low inductance)
- › Mechanical Drop & Vibration compliant.
- › Mounting method: 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

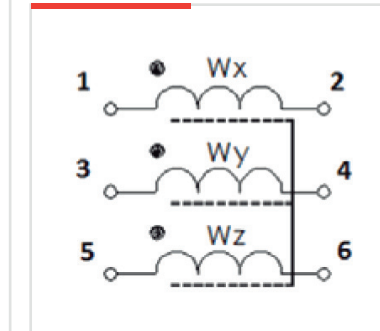
DIMENSIONS AND RECOMMENDED PAD-LAYOUT (mm)



PINOUT



ELECTRICAL DIAGRAM



ELECTRICAL SPECIFICATIONS | 20kHz

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	Sensit. _{x,y,z} (mV/A/m) Min (*)
3DCC10-A-0066J	645 / 664 / 610 μH	4.1/4.3/3.4	20	500	500	21.2	20.5	23.7	7.0
3DCC10-A-0600J	8.0 / 8.0 / 7.3 mH	4.4/4.4/4.0	20	150	120	240	240	240	27.0

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