

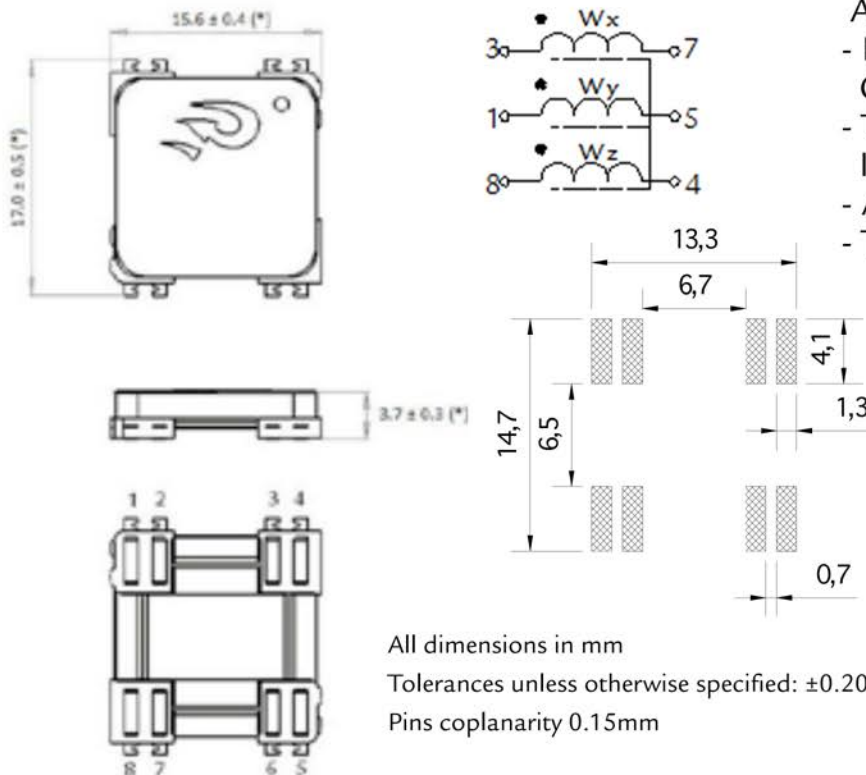
3DC1515

SMD 3D Coil 17.5x16x4 mm MAX (2.47 mH – 10mH)

Characteristics

- This 3D coil, RFID innovate component, highlights for its high sensitivity, low profile and small size.
- Ensures optimal field sensing regardless position.
- Best choice for Keyless Entry Systems.
- High drop test resistance (up to 500 times 1m) due to a maximized pin area.
- High stability in temperature (-40°C to +85°C).
- Isotropic version available.
- With cover cap or labeled.
- Designed for 125 kHz and 134 kHz.

Dimensions and recommended pad layout



All dimensions in mm

Tolerances unless otherwise specified: ± 0.20 mm

Pins coplanarity 0.15mm

Main applications

Automotive.

- Passive keyless entry and Keyless Go systems.

- TPMS with wake up functions.

Industrial.

- Access control.

- Tracking devices.

If the three coils from this component are going to be connected to a common GND; pins 1, 7 and 8 should be the chosen ones as common connection in order to keep the electromagnetic characteristics of the part.

Electrical specifications

P/N	L x,y,z (mH)	Cres (pF)	Q _{x,y} typ	SRF _{x,y} (KHz) min	SRF _z (KHz) min	RDC max x,y (Ω)	RDC max z(Ω)	Sensitivity x,y,z (mVpp/App/m)
3DC15-0247J	2.47	656	>23	400	900	75	75	>65
3DC15-0345J	3.45	470	>27	300	700	77	116	>67
3DC15-0405J	4.05	400	>27	400	800	98	98	>72
3DC15-0477J	4.77	340	>28	300	600	100	136	>80
3DC15-0491J	4.91	330	>27	300	700	100	140	>85
3DC15-0720J	7.20	225	>30	250	600	120	170	>95
3DC15-1000J	10.00	162	>25	220	500	160	275	>140

This chart is a reference guide for the most common required values at working frequency of 125 kHz. Any other inductance value at LF or tighter tolerances can be provided. Also can be supplied different inductance values in the different winding axis. Please contact our sales department for any inquiry.

L and Q factor measured at 125 kHz, 1 Vac.

Sensitivity measured with Helmholtz coils H=1.27 App/m @125 kHz. Contact us for measurement specification.

SRF: Self Resonant Frequency of the coil.