## 3DC15CAP

### SMD CAP 3D Coil

17.5x16x4.1mm MAX (2.47mH - 7.2mH)

3-AXIS TRANSPONDER INDUCTOR (3DCOILS™)





### **APPLICATIONS**

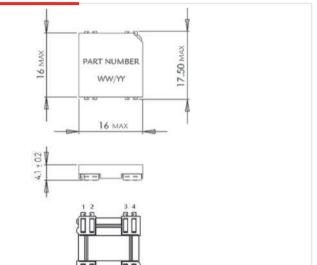
- > Automotive passive keyless entry systems.
- > Automotive TPMS with wake up functions.
- > Access control.
- > Tracking devices.

### **CHARACTERISTICS**

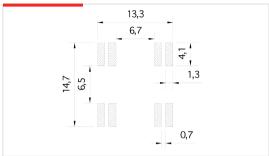
- > Evolution of the 3DC15 series.
- > The cap provides an additional mechanical protection to the coil, combined with a high performance in temperature.
- > Also, the cap allows an easier handling and placing aof the part.
- > High drop test resistance (up to 500 times 1m) due to a maximized pin area.
- > High stability in temperature (-40°C to +85°C).
- > Isotropic version available.
- > Designed for 125 kHz and 134 kHz.

### 02 SPECIFICATIONS

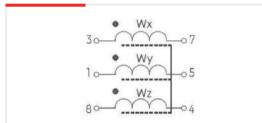
# **DIMENSIONS (mm)**



#### **RECOMMENDED PAD-LAYOUT**



#### **ELECTRICAL DIAGRAM**



#### **ELECTRICAL SPECIFICATIONS**

CODE	L x,y,z (mH)	Q x,y,z Min	Frequency (kHz)	Cres (pF)	SRF x,y (kHz) Min	SRF z (kHz) Min	DCR x,y (Ω) Max	DCR z (Ω) Max	Sensitivity x,y,z (mVpp/App/m) Min
3DC15CAP-0247J	2.47	22	125	656	400	900	75	75	65
3DC15CAP-0491J	4.91	25	125	330	250	550	100	140	70
3DC15CAP-0720J	7.20	20	125	225	250	550	120	230	95
	Longth	(100.000)	Width (mana)	Unial	hat (mama)				

Length (mm)	Width (mm)	Height (mm)
16.0	17.5	4.1

> Pins coplanarity 0.1 mm.

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=8.36 App/m @125 kHz. Contact us for measurement specification. SRF: Self Resonant Frequency of the coil.