## 3DC11X11 with cap SMD 3D Coil 11x11x3.6 mm (7.2 mH - 2.38 mH) with cap



## Features

Small solution of 3D coil designed to achieve a very good electrical performance in the smallest dimensions. Applications:

- Automotive. -
- Passive keyless entry and Keyless Go Systems.
- RTPMS with wake up functions.
- Industrial logistics and control.
- Access control.
- Tracking devices.

Keyless entry systems is a typical application for this coil, the isotropy is often sough in RF antenna. In transponder applications, this feature has been achieved by the combination of 3 single coils oriented in the 3 space axis with the aim of covering the maximum space orientation.

This small size 3D coil offers the possibility of assembly in single component 3 coils with full functionality, thus reducing cost, saving PCB space and increasing the circuit reliability.

## Dimensions, electric diagram and pad layout



All dimensions in mm



Pins coplanarity 0.15mm



## **Electrical specifications**

P/N	L x,y,z (mH)	Cres (pF)	Q x,y,z	SRF x, y (kHz)	SRF z (kHz)	RDC x,y Max (Ω)	RDC z Max (Ω)	Sensitivity x,y,z (mVpp/App/m)
3DC11CAP-0238J	2.38	680	>25	>500	>900	50	50	40
3DC11CAP-0247J	2.47	656	>25	>500	>800	50	50	50
3DC11CAP-0345J	3.45	470	>29	>400	>800	60	70	55
3DC11CAP-0405J	4.05	400	>30	>400	>600	67	67	60
3DC11CAP-0477J	4.77	340	>30	>370	>600	70	96	65
3DC11CAP-0491J	4.91	330	>32	>350	>600	74	98	65
3DC11CAP-0720J	7.20	225	>25	>350	>500	84	120	72

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.