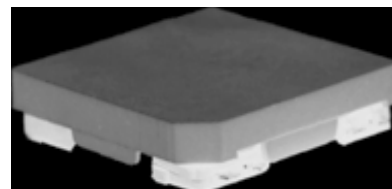


3DC15CAP

SMD CAP 3D Coil 17.5x16x4.30 mm MAX (2.47 mH – 7.2 mH)

Features

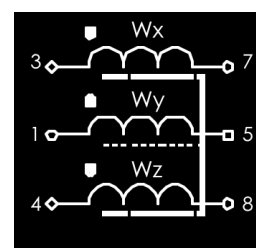
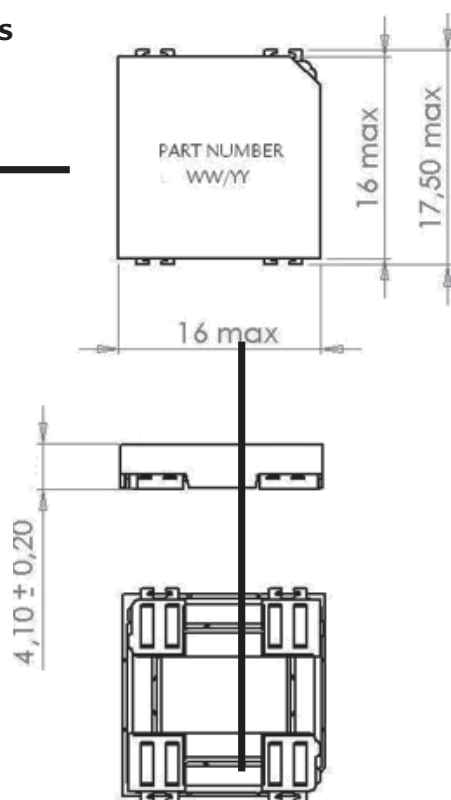
The 3DC1515CAP series is an evolution of the 3DC1515 series, which combines the characteristics of the newest 3D coil from PREMO RFID and the advantages of a high quality plastic material used for the cap. This cap provides an additional mechanical protection to the coil with the thinnest walls, combined with a high performance in temperature. The cap allows an easier handling and placing of the part.



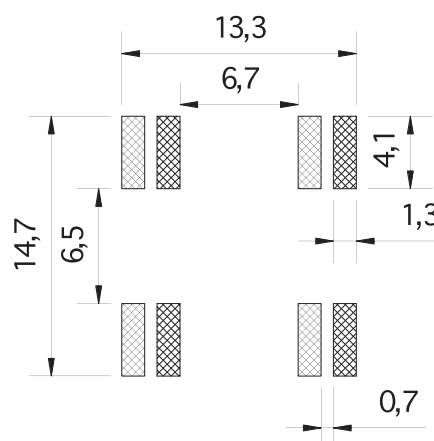
Keyless entry systems are a typical application for this coil, the Isotropy is often sought in RF antenna. In transponder applications, this feature has been achieved by the combination of 3 single coils oriented in the 3 space axis. The new 3D coil from PREMO RFID offers the possibility of mounting a single component instead of three, thus reducing cost, saving PCB space and increasing the circuit reliability. Sensitivity, low profile and small size are the key of this RFID innovative component. Best choice for keyless entry systems the three tri-rectangular windings ensure optimum field sensing regardless position.

- Size: 17.5 x 16.0 x 4.3mm MAX
- High drop test resistance (up to 500 times 1 m) due to a maximized pin area.
- High stability in temperature (-40°C to +85°C).
- Isotropic version available.
- With cover cap or labelled.
- Taped & Reeled.
- Designed for 125KHz and 134KHz.

Dimensions



Pins coplanarity 0.15 mm



3DC15CAP

SMD CAP 3D Coil 17.5x16x4.30 mm MAX (2.47 mH – 7.2 mH)

Electrical specifications

Código	L x,y,z (mH)	Q x,y,z Min	Fre- quency (kHz)	C _{res} (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	Length (mm)	Width (mm)	Height (mm)
3DC15CAP-0247J	2.47	23	125	656	500	1000	75	75	55	16.0	17.5	4.3
3DC15CAP-0491J	4.91	27	125	330	350	750	105	140	85	16.0	17.5	4.3
3DC15CAP-0720J	7.20	30	125	225	330	700	120	172	95	16.0	17.5	4.3

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.