

## SMD 3D Coil(11.8X11.8X2.9mm) SMD 3D11 SERIES

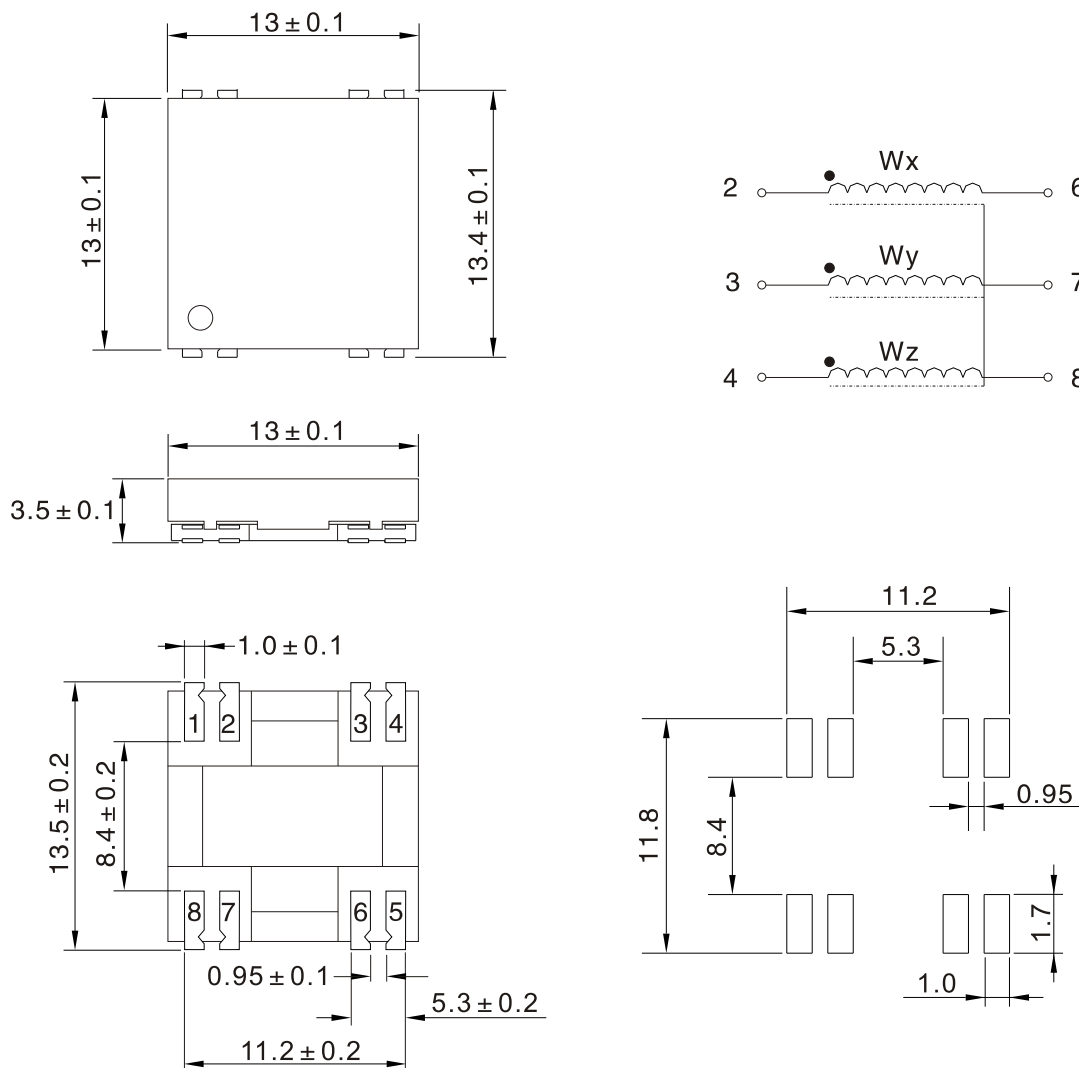
Small solution of 3D coil designed to achieve a very good electrical performance in the smallest dimensions.

Applications:

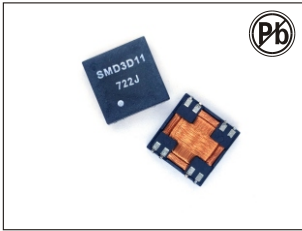
- Automotive
- Passive keyless entry and Keyless Go Systems
- RTPMS with wake up functions
- Industrial logistics and control
- Access control
- Tracking devices

Keyless entry systems is a typical application for this coil, the isotropy is often 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 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



Note: All specifications subject to change without notice.



## SMD 3D Coil(11.8X11.8X2.9mm) SMD 3D11 SERIES

### Electrical specifications

P/N SMD3D11-	L <sub>x,y,z</sub> (mH)	Q <sub>x,y,z</sub>	SRF <sub>x,y</sub> (KHz,typ)	SRF <sub>z</sub> (KHz,Min)	RDC <sub>x,y</sub> (Ω Max)	RDC <sub>z</sub> (Ω Max)
242J	2.38	23	500	1000	75	95
252J	2.47	23	500	800	75	95
352J	3.45	26	450	800	85	120
402J	4.05	26	400	800	98	138
472J	4.77	26	380	800	117	170
492J	4.91	26	350	750	120	175
722J	7.20	30	330	700	150	210
103J	10.0	25	250	550	165	280

- ※ Test frequency 125KHz,1V
- ※ Sensitivity (S0) measured with Helmholtz Coils H=8.36 A/m @ 125kHz.
- ※ SRF: Self Resonant Frequency of the coil.
- ※ W<sub>x</sub>/W<sub>y</sub>/W<sub>z</sub> means winding coil of X, Y and Z axis.
- ※ Test under the condition of relative humidity of 85%
- ※ Operating temperature -40℃ to +85℃
- ※ Any other inductance value at LF or tighter tolerances can be provided. Also can be supplied different inductance value in the different winding axis.