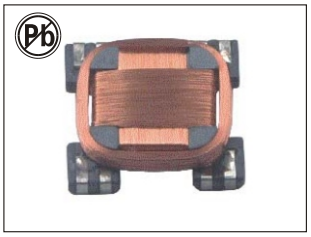
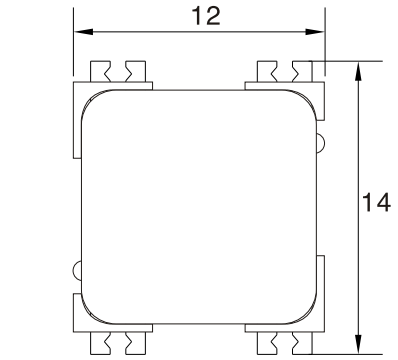
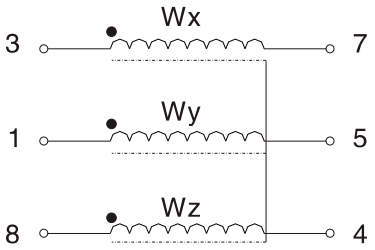


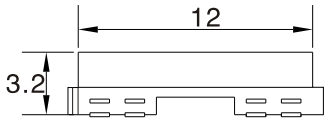
SMD 3D Coil 12X14X3.2mmMax(2.47mH–10mH)
3D12 SERIES

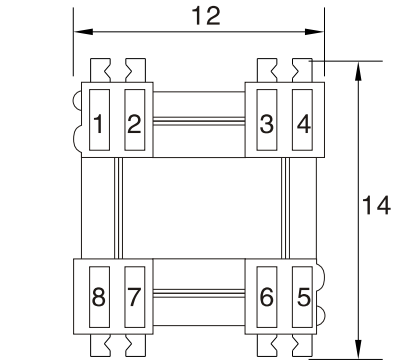
Small solution of 3D coil designed to achieve a verygood electrical performance in the smallest dimensions.
Applications:
– Automotive
– Passive keyless entry and Keyless Go Systems
– RTPMS with wake up functions
– Industrial logistics and control
– Access control
– Tracking devices
Keyless entry systems 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.

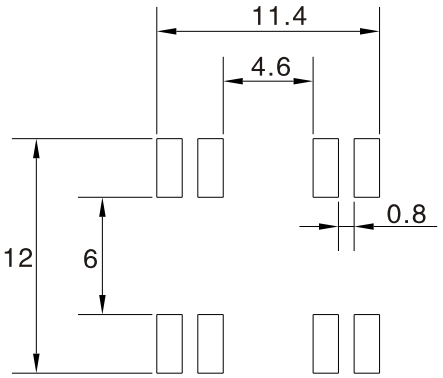
Dimensions



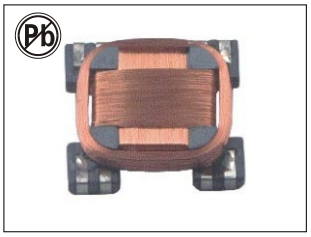








Note:All specifications subject to change without notice.



SMD 3D Coil 12X14X3.2mmMax(2.47mH–10mH)
3D12 SERIES

Electrical specifications

P/N	Lx,y,z	Cres(pF)	Qx,y typ	SRFx,y (KHz,Min)	SRFz (KHz,Min)	RDCx,y (Ω Max)	RDCz (Ω Max)	Sensitivity x,y,z (mVpp/App/m)
3D12–242	2.47	656	>23	>500	>1000	75	75	>55
3D12–252	2.58	628	>23	>500	>800	75	75	>57
3D12–342	3.45	470	>27	>450	>800	85	100	>67
3D12–402	4.05	400	>27	>400	>800	98	98	>72
3D12–472	4.77	340	>28	>380	>800	100	136	>85
3D12–492	4.91	330	>27	>350	>750	105	140	>85
3D12–722	7.20	225	>30	>330	>700	120	172	>95
3D12–103	10.0	162	>25	>250	>550	165	258	>105

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.