

# ECM 15mm<sup>2</sup> 3D Transponder Inductor

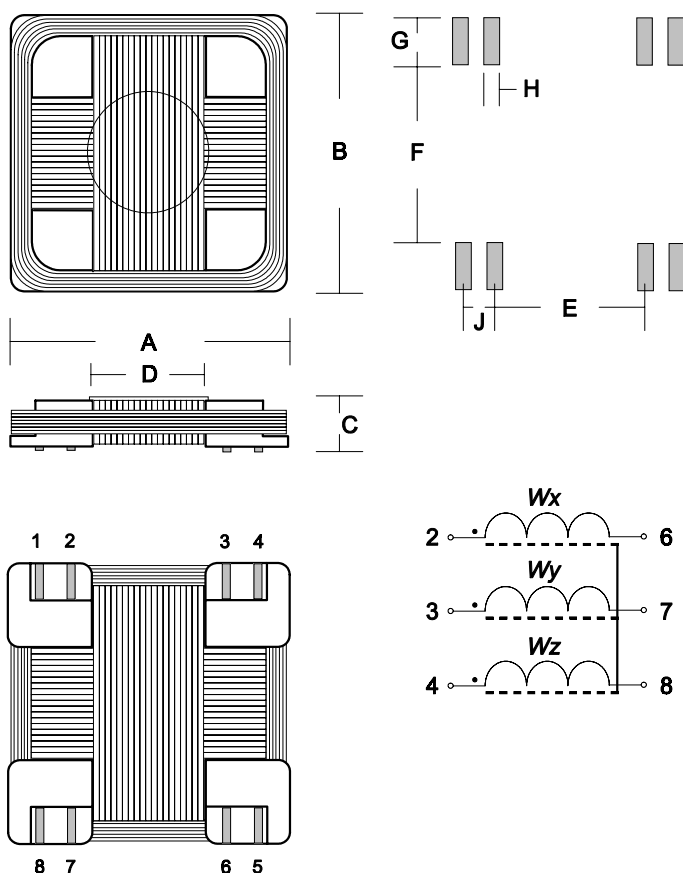
## 3DC1515 Series

- 125kHz Transponder Application
- Equal Sensitivity X, Y, and Z Axis
- Surface Mount
- Ferrite Core
- Inductance 900uH to 4.05mH
- Temp. Range -40 to 85 °C
- Tape and Reeled



The 3DC series of surface mountable 3D antenna inductors is the very first of its type specifically designed for 125kHz transponder applications. The coil dimensions are optimised to achieve maximum sensitivity on each coil axis.

### COMPONENT OUTLINE



### DIMENSIONS (mm)

A	15.0 +/-0.3
B	15.0 +/-0.3
C	5.0 +/-0.3
D	10.0 min.
E	8.0
F	9.5
G	3.0
H	0.9
J	2.0

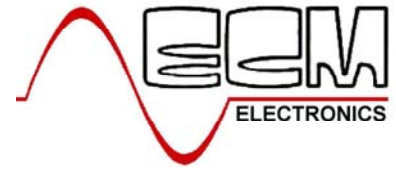
### CONNECTION

Pin 1	N/C
Pin 2	Start L x
Pin 3	Start L y
Pin 4	Start L z
Pin 5	N/C
Pin 6	End L x
Pin 7	End L y
Pin 8	End L z

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<b>ECM Part</b>	<b>Lx / Ly / Lz (mH)</b>	<b>Tol %</b>	<b>C (pF)</b>	<b>Q Min. (**kHz)</b>	<b>SRF Min. (kHz)</b>
3DC1515T-901	0.90 @125 kHz	J	1800	25	700
3DC1515T-102	1.08 @125 kHz	J	1500	25	600
3DC1515T-162	1.62 @125 kHz	J	1000	25	400
3DC1515T-192	1.97 @125 kHz	J	820	25	400
3DC1515T-242	2.38 @125 kHz	J	680	25	350
3DC1515T-247	2.47 @125kHz	J	660	25	350
3DC1515T-292	2.89 @125 kHz	J	560	25	350
3DC1515T-342	3.44 @125 kHz	J	470	25	300
3DC1515T-402	4.05 @125 kHz	J	400	25	300

**TOLERANCES J=5%**

**\*\* = Operating and Test Frequency as specified in 'L' column**

**C = Capacitor for tuning circuits (125kHz) NB - the parallel input Cap. of the IC must also be taken into account**