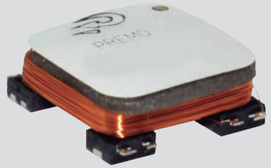
3DC11LP-AOIF

SMD 3D11 Coil Low Profile AOI (foam option)

13x11.6x4.7mm

3-AXIS TRANSPONDER INDUCTOR (3DCOILS™)



APPLICATIONS

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

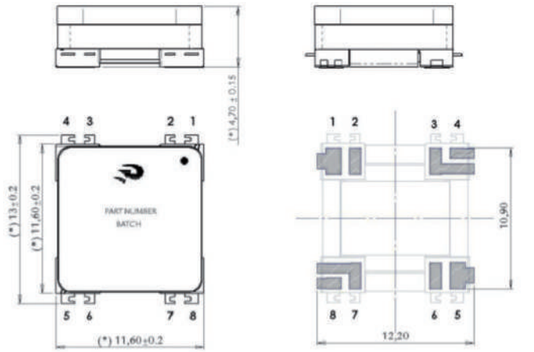
01 CHARACTERISTICS

AOI version for the 3DC11LP with a label foam on top to improve mechanical characteristics:

- Evolution of the 3DC11LP-AOI series.
- The foam, placed on top of the part, absorbs better the shocks and, thus, improves the mechanical performance of the piece.
- Very good electrical performance in the smallest dimensions.
- High stability in temperature (-40 °C to +85 °C).
- High sensitivity values.
- The inductivity in each axis can be customized to achieve customer requirements.
- Designs at lower frequencies, 20 kHz or 40 kHz, show a very good electrical performance as well.
- Allows the Automatic Optical Inspection in customers reflow process since provides lateral meniscus in all soldering points.

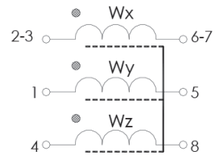
02 SPECIFICATIONS

DIMENSIONS AND RECOMMENDED PAD-LAYOUT (mm)



› Pins coplanarity 0.1 mm.

ELECTRICAL DIAGRAM



ELECTRICAL SPECIFICATIONS

CODE	L x,y,z (mH)	Q x,y nom	Qz nom	f (kHz)	SRFx,y (kHz) Min	SRFz (kHz) Min	DCRx (Ohm) Max	DCRy (Ohm) Max	DCRz (Ohm) Max	Cpxy (pF) Max	Cpxz (pF) Max	C pyz (pF) Max
3DC11LP-AOIF-0238J	2.38	25	19	125	700	750	50	55	83	25	10	10
3DC11LP-AOIF-0477J	4.77	26	24	125	500	650	91	103	122	30	15	15
3DC11LP-AOIF-0720J	7.20	20	20	125	300	450	127	143	220	40	15	15
3DC11LPAOIF-C-0720J	7.20	20	20	134	300	450	127	143	220	40	15	15
3DC11LPAOIF-A-3000J	30	6	5	20	100	200	605	704	539	50	15	15

CODE	Sensitivity x,y (mV/A/m) Min(*)	Sensitivity z (mV/A/m) Min(*)
3DC11LP-AOIF-0238J	40	38
3DC11LP-AOIF-0477J	60	55
3DC11LP-AOIF-0720J	80	70
3DC11LPAOIF-C-0720J	80	70
3DC11LPAOIF-A-3000J	27	23

This chart is a reference guide for the most common required values at working frequency of 125, 134 and 20 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.