

# TR1102

SMD Ferrite Transponder Inductor (16.2 mH-0.29 mH)

11x2.6x2.2 mm

(16.2 mH-0.29 mH)

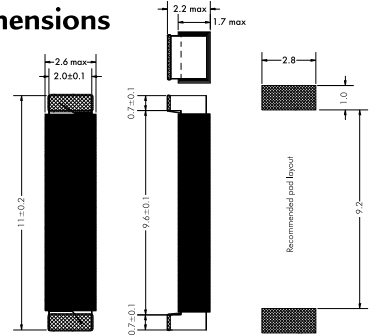
## Features

The TR1102 series of surface mountable ferrite wound inductor is the very first SMD coil designed for transponder use. Its length and cross sectional area are optimized to achieve the maximum sensibility in the coil axis.

Its size is excellent for plastic moulded immobilizer transponders.

The TR1102 is the best solution when both cost and high-speed assembly of the circuit components are sought.

## Dimensions



## Electrical specifications

P/N	L (mH) @125 kHz	Tolerance	C <sub>res</sub> (pF)	Q @125 kHz	SRF (kHz)	Sensitivity (mV <sub>pp</sub> /A <sub>pp</sub> /m) @125 kHz
TR1102-1620J	16.2	±5%	100	>30	>200	>100
TR1102-1350J	13.5	±5%	120	>30	>200	>95
TR1102-1080J	10.8	±5%	150	>25	>250	>90
TR1102-0900J	9.00	±5%	180	>30	>300	>80
TR1102-0736J	7.36	±5%	220	>29	>350	>75
TR1102-0720J	7.20	±5%	225	>25	>330	>80
TR1102-0600J	6.00	±5%	270	>25	>350	>70
TR1102-0491J	4.91	±5%	330	>30	>400	>65
TR1102-0415J	4.15	±5%	400	>30	>400	>55
TR1102-0344J	3.44	±5%	470	>30	>450	>50
TR1102-0289J	2.89	±5%	560	>40	>550	>45
TR1102-0238J	2.38	±5%	680	>36	>600	>43
TR1102-0197J	1.97	±5%	820	>30	>600	>40
TR1102-0162+	1.62	±5%, ±10%	1000	>29	>700	>35
TR1102-0108+	1.08	±5%, ±10%	1500	>30	>800	>30
TR1102-0090+	0.90	±5%, ±10%	1800	>24	>900	>23
TR1102-0073+	0.73	±5%, ±10%	2200	>22	>1000	>20
TR1102-0060+	0.60	±5%, ±10%	2700	>25	>1000	>18
TR1102-0049+	0.49	±5%, ±10%	3300	>25	>2000	>16
TR1102-0041+	0.41	±5%, ±10%	3900	>20	>3000	>15
TR1102-0034+	0.34	±5%, ±10%	4700	>18	>3000	>15
TR1102-0029+	0.29	±5%, ±10%	5600	>20	>3000	>10

Replace + with the tolerance code letter.

Operating and test freq: 125KHz.

SRF: Self-resonant frequency of the coil.

C: Capacitor for tuning circuits (125khz).

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. Please contact our sales department for any inquiry.

Sensitivity measured with Helmholtz coils H=8.36 A<sub>pp</sub>/m @125 kHz. Contact us for measurement specification.

• Terminals: Ag-Ni-Sn100.

• Wire: H, 180°C, Solderable.

• Max. Operating Temperature 130°C.

• Refer to the General Features of SMD transponder inductors page.

# TR1504

## SMD Ferrite Transponder Inductor

15.7x5.2x2.2 mm  
(7.20 mH – 0.29 mH)

### Features

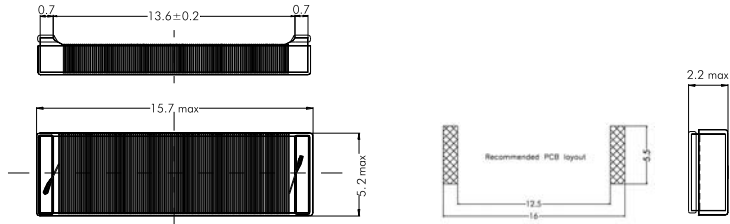
The TR1504 series is the large core volume alternative for Surface mountable low profile, ferrite wound transponder inductor.

Although the height remains the same as the TR1102 series, the larger core cross sectional area and length, allow a better reading distance and sensibility. It is recommended when the IC power consumption is high as well.

Main characteristics are:

- High sensitivity levels.
- Low profile.
- Winding coated to avoid handling problems.

### Dimensions



### Electrical specifications

P/N	L (mH) @125 kHz	Tolerance	C <sub>res</sub> (pF)	Q @125 kHz	SRF (kHz)	Sensitivity (mV <sub>pp</sub> /A <sub>pp</sub> /m) @125 kHz
TR1504-0720J	7.20	±5%	225	>20	>220	>145
TR1504-0600J	6.00	±5%	270	>20	>300	>120
TR1504-0491J	4.91	±5%	330	>22	>330	>105
TR1504-0415J	4.15	±5%	400	>30	>350	>100
TR1504-0344J	3.44	±5%	470	>40	>450	>90
TR1504-0289J	2.89	±5%	560	>35	>450	>80
TR1504-0238J	2.38	±5%	680	>36	>350	>75
TR1504-0197J	1.97	±5%	820	>30	>600	>65
TR1504-0162J	1.62	±5%	1000	>33	>900	>60
TR1504-0108J	1.08	±5%	1500	>20	>1000	>45
TR1504-0090J	0.90	±5%	1800	>20	>1000	>40
TR1504-0073J	0.73	±5%	2200	>20	>2000	>35
TR1504-0060J	0.60	±5%	2700	>35	>2000	>33
TR1504-0049J	0.49	±5%	3300	>30	>2500	>30
TR1504-0034J	0.34	±5%	4700	>25	>3000	>26
TR1504-0029J	0.29	±5%	5600	>24	>3000	>24

Replace + with the tolerance code letter.

Operating and test freq: 125KHz.

SRF: Self-resonant frequency of the coil.

C: Capacitor for tuning circuits (125kHz).

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. Please contact our sales department for any inquiry.

Sensitivity measured with Helmholtz coils H=8.36 A<sub>pp</sub>/m @125 kHz. Contact us for measurement specification.

- Terminals: Ag-Ni-Sn100.
- Wire: H, 180°C, Solderable.
- Max. Operating Temperature 130°C.
- Refer to the General Features of SMD transponder inductors page.