

# TP0602

Micro SMD Hard Ferrite Transponder Inductor (10.8 mH-2.38 mH)

6.6x2.3x1.75 mm

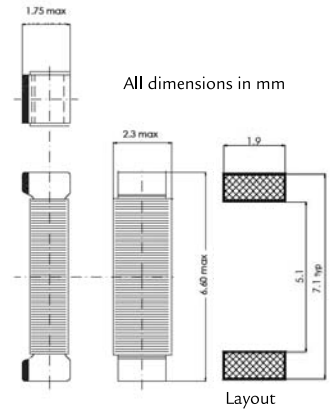
(10.8 mH-2.38 mH)

## Features

The TP0602 Series of Surface Mountable ferrite wound inductor is a small transponder solution for automotive applications like TPMS, Keyless Go and Keyless entry systems.

- Size: 6.6mm x 2.3mm x 1.75mm.
  - Good mechanical performance.
  - High sensitivity for 20KHz, 40KHz and 125KHz applications.
  - Good performance in thermal shock test.
  - Good cost/performance ratio. -Available high inductance version for hearing aids applications.
- Good solution for TPMS moulded solutions. The TP0602 is the smaller SMD transponder coil available in the market.

## Dimensions



## Electrical specifications

### 125KHz

| P/N          | L (mH) | Tolerance | Q   | SRF (kHz) | Sensitivity (mV <sub>pp</sub> /A <sub>pp</sub> /m) |
|--------------|--------|-----------|-----|-----------|--|
| TP0602-1080J | 10.8   | ±5%       | >20 | >300      | >40  |
| TP0602-0900J | 9.00   | ±5%       | >20 | >300      | >38  |
| TP0602-0736J | 7.36   | ±5%       | >23 | >400      | >36  |
| TP0602-0720J | 7.20   | ±5%       | >20 | >450      | >35  |
| TP0602-0600J | 6.00   | ±5%       | >23 | >450      | >32  |
| TP0602-0491J | 4.91   | ±5%       | >25 | >600      | >30  |
| TP0602-0415J | 4.15   | ±5%       | >20 | >600      | >25  |
| TP0602-0344J | 3.44   | ±5%       | >25 | >700      | >22  |
| TP0602-0289J | 2.89   | ±5%       | >30 | >1000     | >20  |
| TP0602-0238J | 2.38   | ±5%       | >35 | >1000     | >18  |

### 20KHz

| P/N         | L (mH) | Tol. | Q (typ) | SRF (KHz) |
|-------------|--------|------|---------|-----------|
| TP0602-124J | 120    | ±5%  | 4.5     | >100      |
| TP0602-104J | 100    | ±5%  | 5.0     | >120      |
| TP0602-823J | 82     | ±5%  | 5.6     | >140      |
| TP0602-673J | 67     | ±5%  | 6.5     | >160      |
| TP0602-563J | 56     | ±5%  | 7.5     | >190      |
| TP0602-473J | 47     | ±5%  | 8.0     | >200      |
| TP0602-333J | 33     | ±5%  | 10      | >200      |

### 40KHz (hearing aids application)

| P/N         | L (mH) | Tol. | Q (typ) | SRF  |
|-------------|--------|------|---------|------|
| TP0602-184J | 184    | ±5%  | 8       | >80  |
| TP0602-124J | 120    | ±5%  | 7       | >120 |
| TP0602-823J | 82     | ±5%  | 7       | >140 |
| TP0602-673J | 67     | ±5%  | 8       | >160 |
| TP0602-563J | 56     | ±5%  | 9       | >190 |
| TP0602-473J | 47     | ±5%  | 9       | >200 |
| TP0602-333J | 33     | ±5%  | 12      | >200 |
| TP0602-203J | 20     | ±5%  | 15      | >250 |

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.