

# SDTR1103CAP

## SMD Drop Resistant Transponder

12.1x4.0x2.9mm MAX  
(2.38mH-9mH)

### Features

The SDTR1103CAP Series of Surface Mount ferrite wound inductor is the best solution when high electrical and mechanical performance is needed. Its length and cross sectional area are optimized to achieve the maximum sensitivity in the coil axis. The construction of the coil offer high mechanical performance due to the plastic base and ferrite laminate.

High stability in temperature, ranges:

$\Delta L_s/L_s$  (-40°C → 25°C): -2% max.

$\Delta L_s/L_s$  (+25°C → +85°C): +0.5% max.

Typical temperature coefficient  $\Delta L_s/^\circ\text{C}$ :  
+200±50ppm/°C.

-40°C to +125°C for TPMS applications.

-40°C to +85°C for Keyless Entry Systems.

### Characteristics

- High sensitivity. 75 mVpp/App/m for 7.2 mH (@125 kHz). 135 mVpp/App/m for 16.2 mH (@125 kHz).
- Mechanical performance. Drop test: more than 500 times x 1 meter.
- CAP protection, 5 sides protected , high reliability with Pick&Place machines warranted.
- Taped & Reel: 3000pcs / reel.
- Inductance values from 340μH to 16.2mH for 125KHz operations (contact PREMO RFID for inductance range for other working frequencies such as 20KHz and 40KHz).

### Applications

- Immobilizers.
- Tire pressure monitoring systems.
- Keyless entry Systems.
- Industrial applications.
- Access control.

### Electrical specifications

| Code              | L (mH) | Q min | SRF (kHz) Min | DRC (Ω) Max | Sensitivity (mVpp/App/m) min |
|-------------------|--------|-------|---------------|-------------|------------------------------|
| SDTR1103CAP-0238J | 2.38   | 45    | 500           | 27.5        | 30                           |
| SDTR1103CAP-491J  | 4.91   | 36    | 380           | 68.2        | 50                           |
| SDTR1103CAP-720J  | 7.20   | 39.5  | 300           | 82.5        | 70                           |
| SDTR1103CAP-900J  | 9.00   | 40.1  | 300           | 92.4        | 80                           |

The specification chart is a reference guide for the most common required values at working frequencies of 125 kHz. Any other inductance value at LF or tighter tolerances can be provided. Please contact our sales department for any inquiry.



### Dimensions

