

Transponder Coils

TPL series

Type: TPL1183427 TPL1183525 TPL1254035

Issue date: November 2010

- All specifications are subject to change without notice.
- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

SMD Transponder Coils

Conformity to RoHS Directive

(1/2) 谷TDK

TPL Series TPL1183427/1183525/1254035

FEATURES

- Because it is complete resin mold, it is high reliability(Because re-mold is possible in customer specially).
- Terminals are high reliability by a spring structure. It has been especially superior in bending and anti-drop proof.
- It maintains stable electrical signal to have employed sectional winding to coil. Because it is a high SRF design structure, a stable electrical characteristic is provided.
- Terminals are lead-free.

APPLICATIONS

Receiving LF Antenna coils for the in-car devices shown below

- Tire-pressure monitoring system (TPMS)
- · Keyless entry system
- Immobilizer

and other electronic devices.

SPECIFICATIONS

Operating temperature range	-40 to +125°C [Including self-temperature rise]
Storage temperature range	-40 to +125°C

SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN





									Dimensione in min
Туре	L	W	Т	TL	TW	А	В	С	Weight(g)
TPL1183427	11.8±0.4	3.4±0.4	2.75±0.3	0.8	2.4	9.9	13.5	2.7	0.33
TPL1183525	11.8±0.5	3.5±0.4	2.4±0.3	0.8	3.2	9.9	13.5	3.5	0.31
TPL1254035	12.5±0.5	3.9±0.5	3.4±0.3	0.8	3.5	10.4	14.4	4.0	0.44

PACKAGING STYLE AND QUANTITIES

Packaging style	Туре	Quantity	
Taping	TPL1183427	2500 pieces/reel	
	TPL1183525	2500 pieces/reel	
	TPL1254035	2000 pieces/reel	
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Dimensions in mm



WTDK

ELECTRICAL CHARACTERISTICS

Inductance ^{*1} (mH)[125kHz]	Inductance tolerance ^{*2} (%)	Q typ. [125kHz]	Self-resonant frequency (kHz)typ.	DC resistance (Ω)typ.	Part No.
7.20	±5	66	690	50	TPL1183427-722J-720N
2.61	±5	50	650	26	TPL1183525-262J-261N
7.08	±5	72	800	45	TPL1254035-712J-708N

*1 This inductance value is an example of the current commercial product.

If a different inductance is needed, please contact us.

 *2 Available for an inductance tolerance of less than $\pm 5\%.$

• Test equipment L, Q, SRF: 4194A IMPEDANCE ANALYZER(HP)

16047E TEST FIXTURE(Agilent) with TDK original base

Rdc: AX-114N DIGITAL OHM METER(ADEX)

• If an ultrasonic process is used, confirm the condition settings in order to prevent disconnection.

TYPICAL ELECTRICAL CHARACTERISTICS INDUCTANCE vs. FREQUENCY CHARACTERISTICS



Q vs. FREQUENCY CHARACTERISTICS

