



Transponder coils

TPLC series

TPLC553030

REMINDERS FOR USING THESE PRODUCTS

Before using these products, be sure to request the delivery specifications.

SAFETY REMINDERS

Please pay sufficient attention to the warnings for safe designing when using these products.

REMINDERS

- The storage period is less than 12 months. Be sure to follow the storage conditions (Temperature: 5 to 40°C, Humidity: 10 to 75% RH or less).
If the storage period elapses, the soldering of the terminal electrodes may deteriorate.
- Do not use or store in locations where there are conditions such as gas corrosion (salt, acid, alkali, etc.).
- Before soldering, be sure to preheat components.
The preheating temperature should be set so that the temperature difference between the solder temperature and chip temperature does not exceed 150°C.
- Soldering corrections after mounting should be within the range of the conditions determined in the specifications.
If overheated, a short circuit, performance deterioration, or lifespan shortening may occur.
- When embedding a printed circuit board where a chip is mounted to a set, be sure that residual stress is not given to the chip due to the overall distortion of the printed circuit board and partial distortion such as at screw tightening portions.
- Self heating (temperature increase) occurs when the power is turned ON, so the tolerance should be sufficient for the set thermal design.
- Use a wrist band to discharge static electricity in your body through the grounding wire.
- Do not expose the products to magnets or magnetic fields.
- Do not use for a purpose outside of the contents regulated in the delivery specifications.
- If an ultrasonic process is used, thoroughly check the condition setting in order to prevent disconnection.
- Do not clean the products with solvents. If a potting resin or a moisture-proof coat containing a solvent such as acetone, toluene or xylene is used, consult with us in advance.
- The products listed on this catalog are intended for use in general electronic equipment (AV equipment, telecommunications equipment, home appliances, amusement equipment, computer equipment, personal equipment, office equipment, measurement equipment, industrial robots) under a normal operation and use condition.
The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society, person or property.
If you intend to use the products in the applications listed below or if you have special requirements exceeding the range or conditions set forth in the each catalog, please contact us.

- (1) Aerospace/Aviation equipment
- (2) Transportation equipment (electric trains, ships, etc.)
- (3) Medical equipment
- (4) Power-generation control equipment
- (5) Atomic energy-related equipment
- (6) Seabed equipment
- (7) Transportation control equipment

- (8) Public information-processing equipment
- (9) Military equipment
- (10) Electric heating apparatus, burning equipment
- (11) Disaster prevention/crime prevention equipment
- (12) Safety equipment
- (13) Other applications that are not considered general-purpose applications

When designing your equipment even for general-purpose applications, you are kindly requested to take into consideration securing protection circuit/device or providing backup circuits in your equipment.

Transponder coils

Product compatible with RoHS directive
AEC-Q200

Overview of the TPLC553030 type

FEATURES

- Transponder coils that ensure high reliability suitable for automotive applications.
- Ensures high reliability suitable for automotive applications by adopting higher heat resistance wire and welding wire connection.

APPLICATION

- Tire-pressure monitoring system (TPMS)

PART NUMBER CONSTRUCTION


TPLC	553030	-	592	H
Series name	LxWxH Dimensions (mm)		Inductance (mH)	
	553030	5.5×3.0×3.0	592	5.9
			Inductance tolerance (%)	
			H	±3

OPERATING TEMPERATURE RANGE, PACKAGE QUANTITY, PRODUCT WEIGHT

Type	Temperature range		Package quantity (pieces/reel)
	Operating temperature* (°C)	Storage temperature (°C)	
TPLC553030	-40 to +125	-40 to +125	2,500

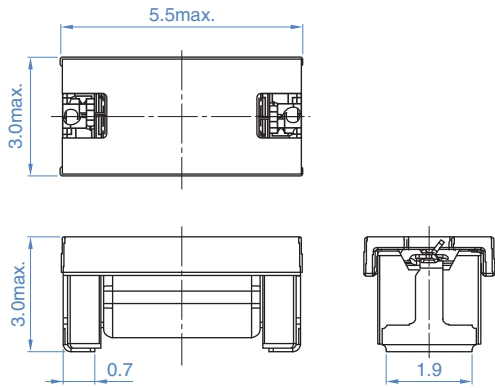
* Operating temperature range includes self-temperature rise.

○ RoHS Directive Compliant Product: See the following for more details. <https://product.tdk.com/info/en/environment/rohs/index.html>

 Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use.
Please note that the contents may change without any prior notice due to reasons such as upgrading.

TPLC553030 type

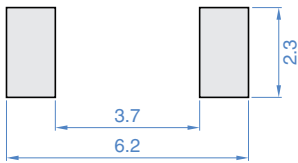
■ SHAPE & DIMENSIONS



Dimensions in mm



■ RECOMMENDED LAND PATTERN



Dimensions in mm

TPLC553030 type

■ ELECTRICAL CHARACTERISTICS

□ CHARACTERISTICS SPECIFICATION TABLE

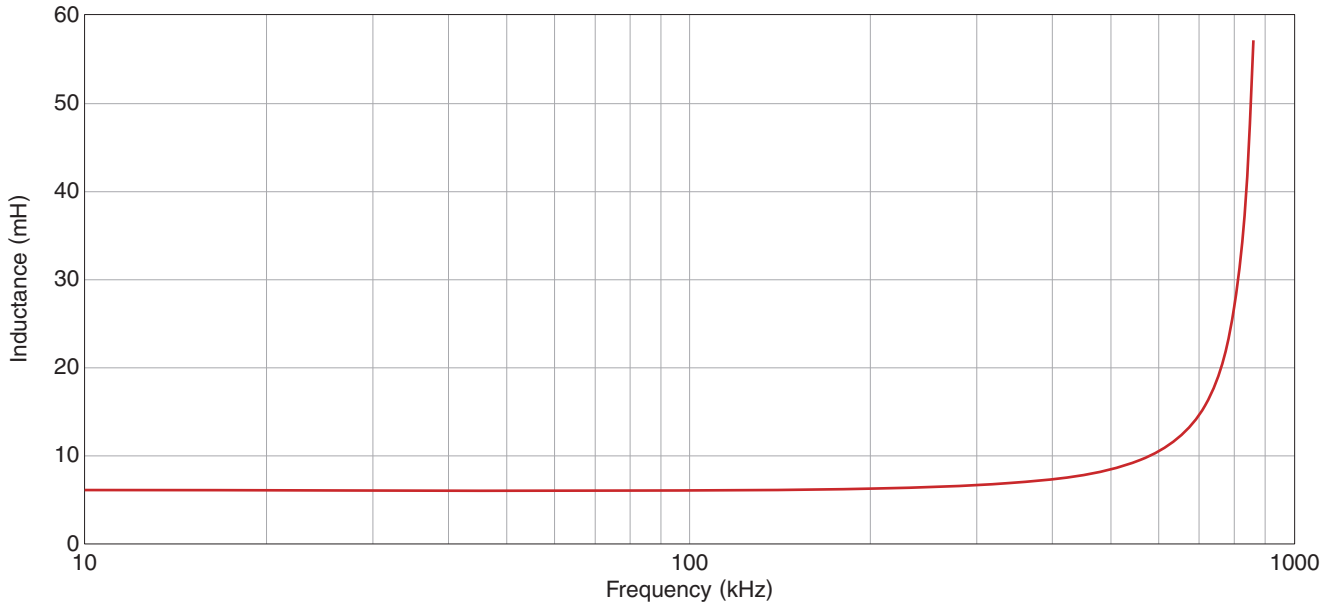
L*		Q	Measurement frequency	DC resistance	Part No.
(mH)	Tolerance	min.	(kHz)	(Ω) max.	
5.89	$\pm 3\%$	35	125	70	TPLC553030-592H

* This inductance value is an example of the current commercial product. If a different inductance is needed, please contact us.

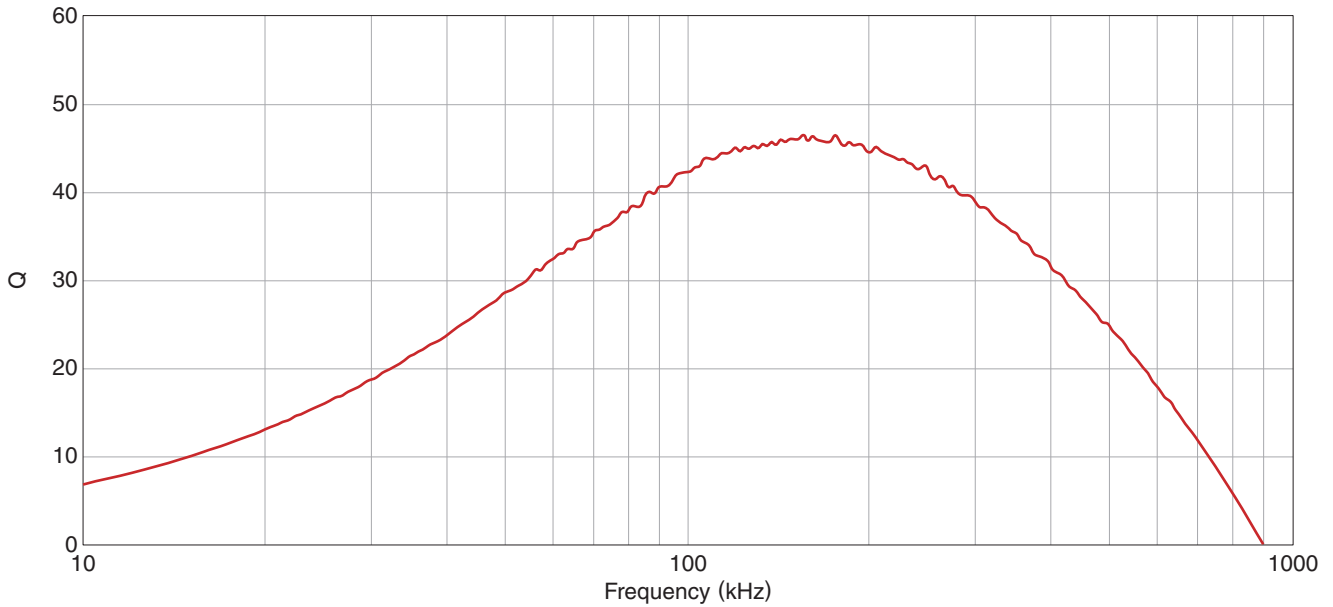
TPLC553030 type

ELECTRICAL CHARACTERISTICS

L FREQUENCY CHARACTERISTICS GRAPH



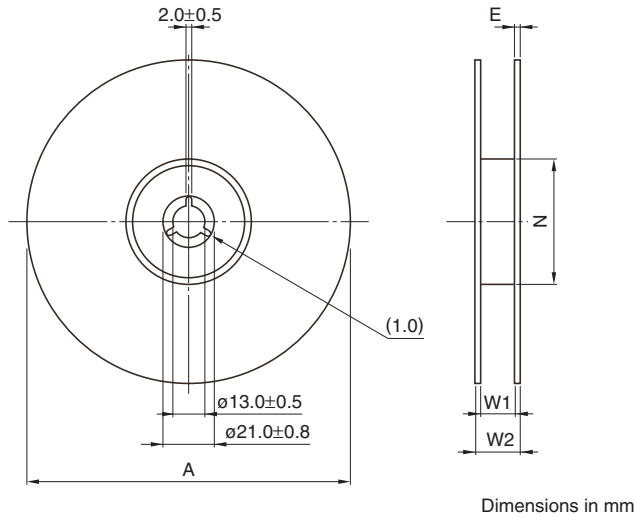
Q FREQUENCY CHARACTERISTICS GRAPH



TPLC553030 type

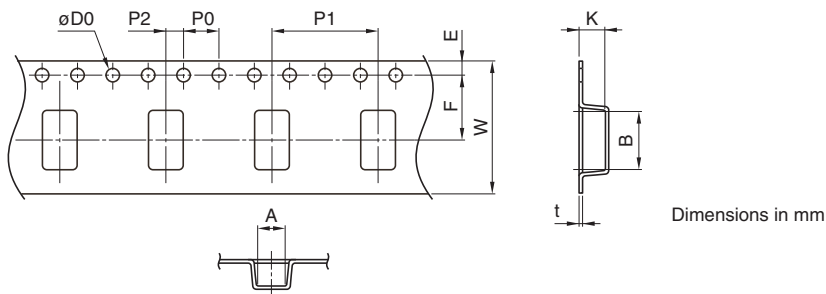
■ PACKAGING STYLE

□ REEL DIMENSIONS



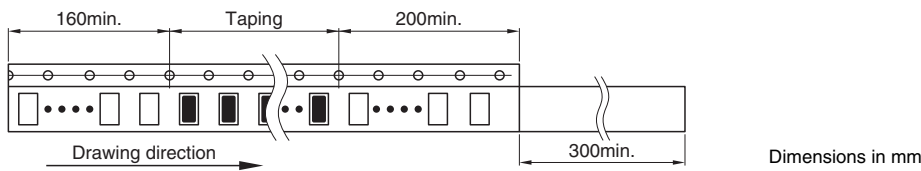
Type	A	W1	W2	N	E
TPLC553030	$\phi 329+0.5/-1.5$	21.4 ± 1.0	17.4 ± 1.0	$\phi 100\pm 1.0$	2

□ TAPE DIMENSIONS



Type	A	B	$\phi D0$	E	F	P0	P1	P2	W	K	t
TPLC553030	3.1	5.6	$1.5+0.1/-0$	1.75 ± 0.1	7.5 ± 0.1	4.0 ± 0.1	8.0 ± 0.1	2.0 ± 0.1	16.0 ± 0.3	3.1	0.3

Dimensions in mm





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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