

Thermistors

Large-diameter inrush current limiters for high-watt applications

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TDK Corporation presents the P27 series of EPCOS NTC inrush current limiters (ICLs) with a nominal disk diameter of 27 mm and lead spacing of 7.5 mm, thus extending the portfolio of large NTC ICLs for industrial electronics applications. The high material density of the new NTC ICLs enables a volume-efficient, high-performance design with a disk thickness of just ≤ 7 mm. The new P27 series with the ordering code B57127P0*M301 features extremely stable and reliable electrical characteristics. It offers a rated resistance of 0.5Ω to 10Ω at 25°C and can handle high currents of up to 30 A, depending on type.

Thanks to their very low resistance in the operating state, NTC ICLs offer very low power dissipation in both AC and DC circuits. The large-diameter components of the new P27 series are especially suitable for use in large electric motors and drives and all kinds of high-watt power supplies as well as in industrial applications such as welding and plasma cutting equipment. The coating material of the P27 series of ICLs is flame retardant and UL 94 V-0 approved. The new components are RoHS-compatible and UL approved (E69802). Samples of the P27 series are available.

Main applications

- Large electric motors and drives and all kinds of high watt power supplies
- Welding and plasma cutting equipment

Main features and benefits

- High material density for a volume-efficient, high-performance design with a disk thickness of just ≤ 7 mm
- Extremely stable electrical characteristics
- Flame-retardant coating (UL 94 V-0)
- UL approval (E69802)
- RoHS-compatible

Key data

Type	Nominal disk diameter [mm]	Lead spacing [mm]	High current endurance (I_{test}) * [A]	Max. current (I_{max}) ** [A]	Resistance at 25°C (R_{25}) [Ω]	Min. resistance at I_{test} (R_{min}) [Ω]
B57127P0508M301	27	7.5	30	24	0.5	0.011
B57127P0109M301			30	22	1	0.013
B57127P0209M301			23	16	2	0.022
B57127P0509M301			20	12	5	0.033
B57127P0709M301			17	11	7	0.045
B57127P0100M301			15	9	10	0.053

* 50 hours at 25 °C

** 1000 hours according to IEC 60539-1

About TDK Corporation

TDK Corporation is a leading electronics company based in Tokyo, Japan. It was established in 1935 to commercialize ferrite, a key material in electronic and magnetic products. TDK's portfolio includes electronic components, modules and systems* marketed under the product brands TDK and EPCOS, power supplies, magnetic application products as well as energy devices, flash memory application devices, and others. TDK focuses on demanding markets in the areas of information and communication technology and consumer, automotive and industrial electronics. The company has a network of design and manufacturing locations and sales offices in Asia, Europe, and in North and South America. In fiscal 2015, TDK posted total sales of USD 9.0 billion and employed about 88,000 people worldwide.

* The product portfolio includes ceramic, aluminum electrolytic and film capacitors, ferrites, inductors, high-frequency components such as surface acoustic wave (SAW) filter products and modules, piezo and protection components, and sensors.

You can download this text and associated images from www.epcos.com/pressreleases.

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