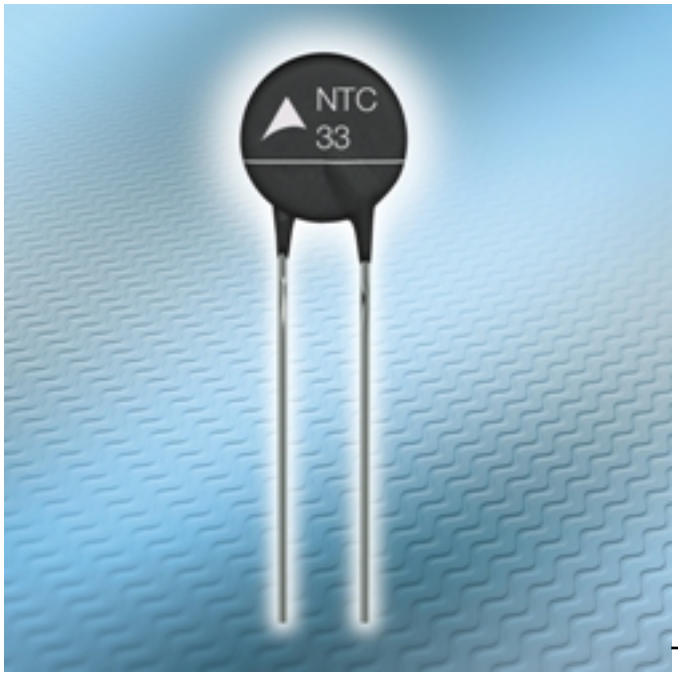
Inrush Current Limiters Extend Range



TDK-EPC has extended its range of EPCOS inrush current limiters (ICL). The P11 series (B57211P*) covers a resistance range from 4 to 25 ? (R_{25}). These types are designed for currents from 2.5 to 5 A in the temperature range between 0 °C and 25 °C. The P13 series (B57213P*) with a resistance range from 3 to 5 ? is designed for higher powers, i.e. for currents of 6 or 7 A.

Components of the new EPCOS ICL series are available with disk diameters of 13 and 14.5 mm (with coating). Overall, TDK-EPC now offers ICL types with disk diameters in the range between 8.5 and 26 mm (with coating).

ICLs are temperature-dependent resistors (NTC thermistors) and are used in applications such as the input circuits of power supplies. They limit the very high currents that occur at the moment of switch-on when charging the DC link circuit capacitors and thus protect diodes or rectifier bridges from destruction. Other applications are motors with slow-starting loads, such as pumps. In this case, ICLs prevent the high inrush currents from triggering line breakers. Compared to fixed resistors for current limitation, ICLs consume less power in continuous operation.

Main applications

· Inrush current limitation in power supplies and motors

Main features and benefits

· Wide range of resistance values and rated currents

- Lower power consumption in continuous operation compared with fixed resistors

Key data

Series/Type	**Resistance R_{25} [?]**	**I_{max} 0 … 25 °C [A]**
P11/B57211P*	4 to 25	2.5 to 5
P13/B57213P*	3 to 5	6 or 7

Lead time is 8-10 weeks. Pricing through distribution is $0.30 each for the P11 and $0.32 each for the P13.

Further information on these products is available under www.epcos.com/ntc_icl [1].

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http://www.ecnmag.com/products/2011/11/inrush-current-limiters-extend-range

Links:
[1] http://www.epcos.com/ntc_icl