High surge robustness with our new TVS diodes

November 2, 2015 2:45 PM ET

Here are the first products in our new series of transient voltage suppressor (TVS) diodes, housed in a small, leadless package DSN1608-2 (1.6 x 0.8 mm) with a height of only 0.26 mm.

The new PTVSxZ1USK(N) product series offers a high surge rating of up to 80 A (8/20 μ s pulse for 5 V type) and 200 W peak pulse power rating (10/1000 μ s) respectively. Reverse stand-off voltages are 5 V and 12 V. The complete series will include 16 types ranging from 5 to 26 V.

Ideal for supply lines protection in all space constrained and thin applications including smart phones, solid-state or hard-disk drives and other mobile devices.

Datasheet downloads:

5 V PTVS5V0Z1USKN

Reverse standoff voltage: VRWM = 5 V

Rated peak pulse current: IPPM = 80 A (8/20 µs pulse) Rated peak pulse power: PPPM = 200 W (10/1000 µs pulse)



Reverse standoff voltage: VRWM = 12 V

Rated peak pulse current: IPPM = 59 A (8/20 µs pulse) Rated peak pulse power: PPPM = 200 W (10/1000 µs pulse)

Why choose our TVS diodes?

Surge pulses, which are generated by grid instabilities and lightning transients, are a threat to any product connected to a power source e.g. supply line or a charging port. While surge pulses are longer pulses of a lower voltage than ESD, they still contain more electric energy and can destroy unprotected electronic circuits. Our TVS diodes have high surge ratings and offer the best protection for smart phones and other mobile devices that need to be charged regularly.

Related links

Package information on DSN1608-2 (SOD963)
Product information page PTVS5V0Z1USKN
Product information page PTVS12VZ1USKN
NXP TVS diodes



