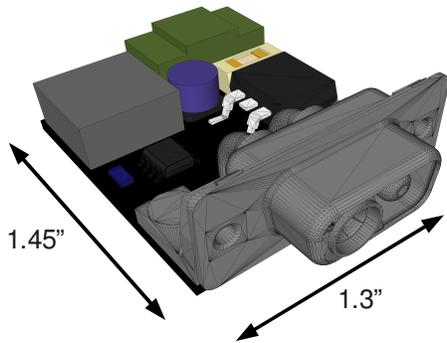


HDTS1275-DB

Heavy Duty Transient Stopper

Input Protection Product



Mounts in a standard DB9 panel opening

Features

- Small form factor
- Standard DB9 style and size main power connector
- Pluggable header with screw lock flanges for the output power
- Transient fault mode indication
- Operating Temperature Range -40 to 85C

What is a “load dump” ?

Wikipedia says ...

The windings of an alternator have a large inductance. When the vehicle battery is being charged, the alternator supplies it with a large current. If the battery gets disconnected while it is being charged the alternator load is decreased. However the alternator continues to supply a large current due to the inductance of the motor windings. It takes time for the magnetic fields inside the alternator to react accordingly, so the rotation of the alternator continues to generate a disproportionately large current which causes a reactive spike in voltage across the alternator.

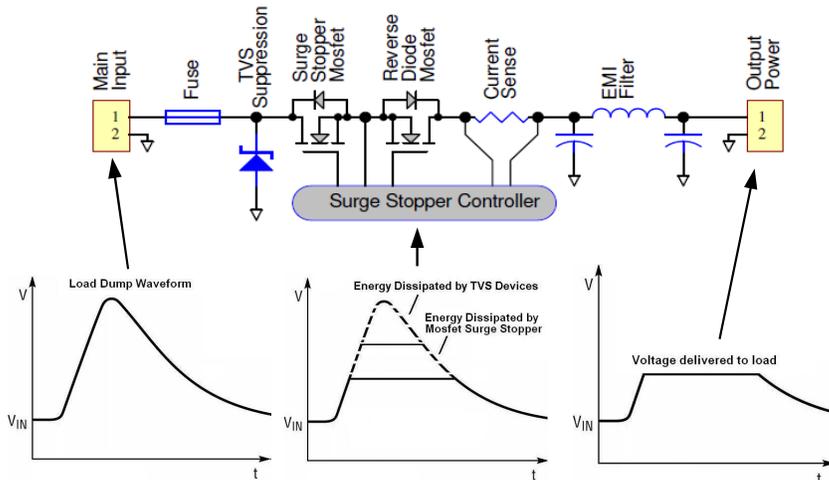
All the loads connected to the alternator see this high voltage spike. The strength of the spike depends on many factors including the speed at which the alternator is rotating and the current which was being supplied to the battery before it was disconnected.

The HDTS1275-DB is a transient surge stopper that protects electronics from the high energy of transients and load dumps. The HDTS1275-DB also protects electronics when power is connected backwards.

The DB9 style and size connector mounts into a standard DB9 panel opening permitting easy integration.

The HDTS1275-DB is designed to MIL-STD-1275 requirements and MIL-STD-810 shock and vibration levels.

HDTS1275-DB Block Diagram



Ordering Information

Models HDTS1275-DB[-x][-Cy]-PBF

where [-x] is maximum output voltage 28, 36 or 40V

ex: HDTS1275-DB-40-PBF; Maximum output voltage is clamped to less than 40V.

Options

where [-Cy] is the optional conformal coating

“-CS” is silicon conformal coating

“-CU” is urethane conformal coating

“-CH” is HumiSeal conformal coating

ex: HDTS1275-DB-40-CS-PBF; Silicon coating