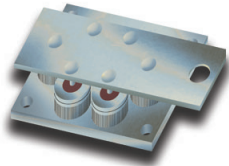


# INTERFACE APP NOTE

# MIL-STD-1275 Surge Protection



Module

## OBJECTIVE

DC applications that include heavy duty motors, generators or where DC power is being switched on and off at frequent intervals, require TVS protection against large surges.

The GPZ1275 is a high power transient voltage suppressor designed to provide protection against long duration switching transient threats. This heavy duty device is constructed using hermetically sealed TVS sub-assemblies.

## BENEFIT

The integrated TVS Diode solution is designed to protect the interface against surge events by using one device to protect DC power lines.

## COMPLIANCE

- IEC 61000-4-2 ±8kV Contact, ±15kV Air Discharge
- IEC 61000-4-4 EFT 40A, 5/50ns
- IEC 61000-4-5 Surge Secondary Lightning, 500A @ 10/1000µs
- MIL-STD-1275

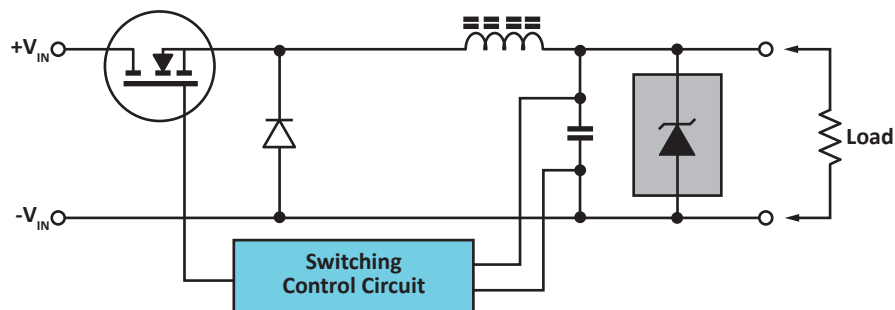
## SOLUTION

- 1 x GPZ1275 Module
- Stand-Off Voltage  $V_{WM}$ : 28V
- Breakdown Voltage  $B_{V_{MIN}}$ : 32V
- $V_C @ I_p$ : 55V @ 500A
- Leakage Current  $I_R$ : 60µA

## ALTERNATE RECOMMENDATIONS

- 1 x SM30KPA28AN

### Buck Circuit



### Boost Circuit

