SENSITRON SEMICONDUCTOR

TECHNICAL DATA DATA SHEET 820, REV. -

Load Dump Protector

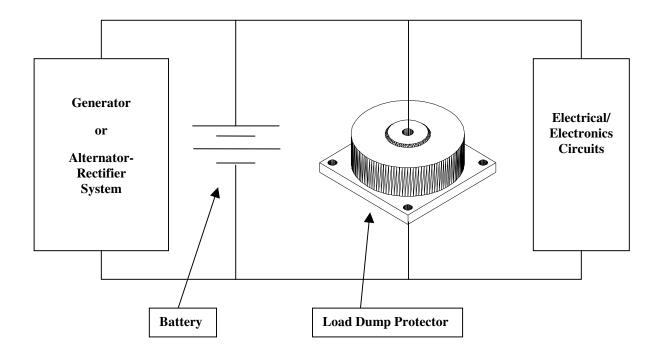
This rugged, hermetic module is capable of protecting battery powered electrical systems from high energy transients and 'over-voltage' power surges resulting from battery disconnect, alternator/generator load dump situations, in either direction.

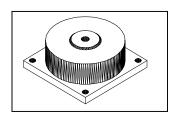
Features:

- Internally hermetic
- Bi-Polar
- Withstands up to 100 Amps, 50ms pulse
- Maximum clamping voltage < 50 Volts
- -55°C to 150°C junction operating range

Applications:

• Any charging system that includes a battery, alternator-rectifier/generator, and electrical/electronics circuits that require protection against power surges.





Operating Conditions:

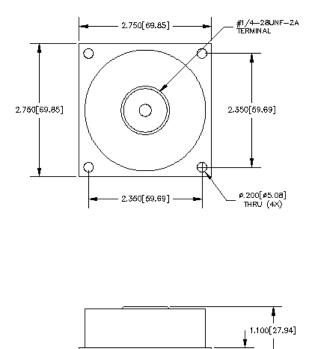
- $V_r = \pm 28$ Vdc, $I_r @ V_r < 10 \mu A @ 25 °C$
- V_Z Minimum: 35 Vdc @ 25 ℃ @ 10mA
- V_Z Maximum: 39 Vdc @ 25 ℃ @ 10mA
- Operating Temperature: -55 ℃ to 150 ℃
- T_C (V_Z) + 0.1% / °C

Reverse Surge and Clamp Protection:

- 100A, 50ms pulse decay to 0 @ 150ms
- \bullet Clamping limit $V_C \leq 50$ Volts in either direction
- Maximum dc power dissipation: 200 Watts @ T_C = 25 ℃

Construction:

• Consists of 10 discrete hermetic sealed large area bipolar silicon devices, plus nickelplated copper heat sink/base plate.



Mechanical Dimensions: In inches / mm

.250[6.35]