

**(Annexure to PI No. 240730109)**

**Brief Technical specifications for Diodes for Power Rectifiers**

**1. General features :**

- i. Glazed ceramic seal to give better creepage for high voltage application.
- ii. High Surge current ratings
- iii. High rated blocking voltages.
- iv. Compression bonded encapsulation.
- v. Suitable for Power rectifier applications.

Polarity :

Item No 1 : Forward

Item No 2 : Reverse

**2. Absolute maximum ratings :**

- i. RMS Forward current  $I_F$  (rms) : 470 A
- ii. Average Forward current  $I_F$  (av) : 300 A rated
- iii. One half cycle surge current  $I_F$  ( $S_m$ ) : 6500 A
- iv. 10 cycle surge current : 3900 A
- v.  $I^2t$  (for fusing ) : 175000 A<sup>2</sup> sec

**3. Critical Dimensions :**

- i. Stud length : 20.5 mm +/- 2 mm
- ii. Stud threads : 0.750-16 UNF -2A Thread
- iii. Hex base Size : 31.5 mm +/- 0.5 mm across flats
- iv. Lead length from base : 200 mm +/- 15 mm upto hole centre
- v. Lead terminal width : 18.5 mm +/- 2 mm
- vi. Lead terminal hole dia : 8.5 mm +/- 0.5 mm

**4. Electrical & Mechanical Characteristics :**

- i. Forward Voltage drop : 1.40 V +/- 0.2 V
  - ii. Repetitive Peak Reverse voltage (rated) : 2600 V
  - iii. Reverse leakage current : 50 mA +/- 5mA
  - iv. Typical reverse recovery time : 13 microsec
  - v. Max resistance case to sink : 0.10 deg C/watt
  - vi. Mounting Torque : 360 in – lb
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