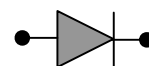


Rectifier Diode SXXHBN/HBR200

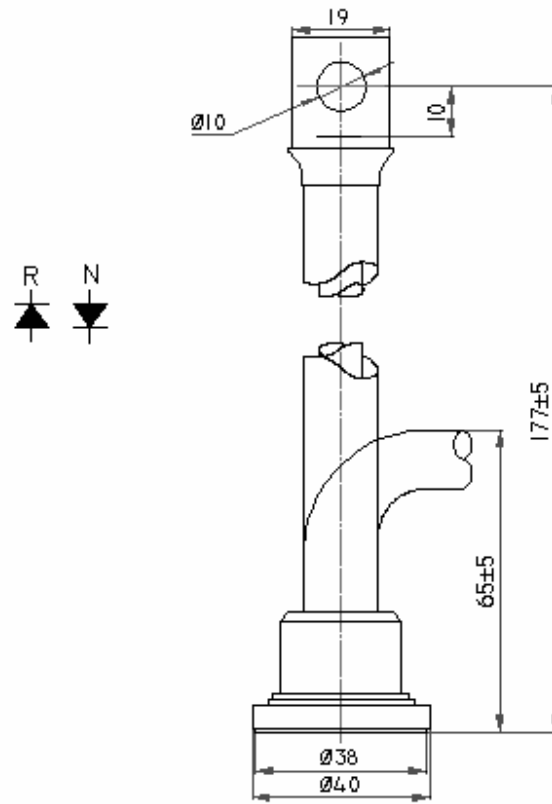
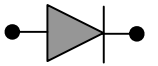


| Symbol | Characteristics | Conditions | $T_J(^{\circ}\text{C})$ | Value | Unit |
|--|---|--|-------------------------|-----------|--------------------|
| BLOCKING PARAMETERS | | | | | |
| V_{RRM} | Repetitive peak reverse voltage | | 180 | 200-1500 | V |
| I_{RRM} | Repetitive peak reverse current | $V = V_{RRM}$ | 180 | 30 | mA |
| CONDUCTING PARAMETERS | | | | | |
| $I_{F(AV)}$ | Average on-state current | 180 sine, 50Hz, $T_C = 130^{\circ}\text{C}$ | | 200 | A |
| I_{RMS} | RMS on-state current | | | 300 | A |
| I_{FSM} | Non repetitive peak surge on-state current | Sine wave, 10mS without reverse voltage | 180 | 4000 | A |
| I^2t | Permissible surge energy | | | 80.00 | kJA ² S |
| V_{FM} | Peak on-state voltage drop | On-state current = 630A | 180 | 1.30 | V |
| V_0 | Typical forward conduction Threshold voltage | | 180 | 0.70 | V |
| r_0 | Typical forward slope resistance | | 180 | 0.60 | mΩ |
| THERMAL & MECHANICAL PARAMETERS | | | | | |
| $R_{TH(J-C)}$ | Thermal impedance, 180 ^o conduction, Sine | Junction to case | | 0.24 | ^o C/W |
| $R_{TH(C-HK)}$ | Thermal impedance | Case to heatsink | | 0.05 | ^o C/W |
| T_J | Maximum Permissible junction temperature | | | 180 | ^o C |
| T_{STG} | Storage temperature range | | | -40 – 180 | ^o C |
| F | Mounting Torque | | | 18 | NM |
| W | Weight | | | 160 | gms |



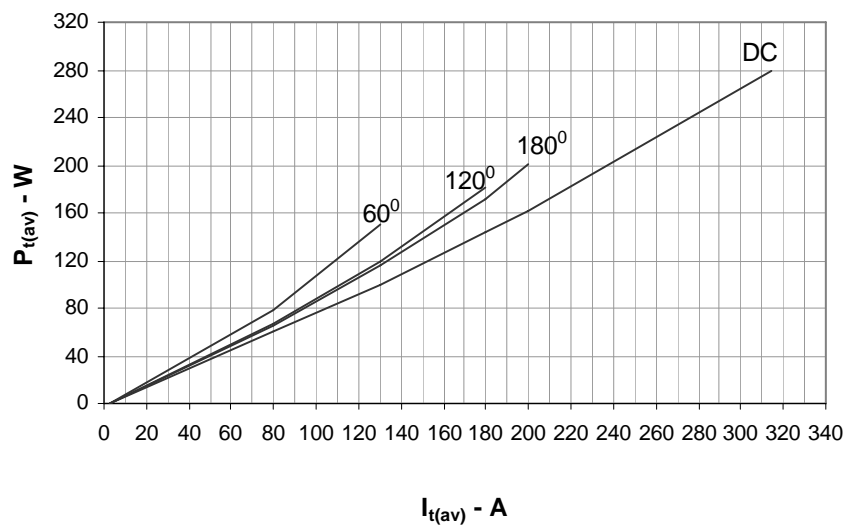
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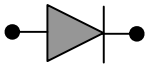
Rectifier Diode SXXHBN/HBR200



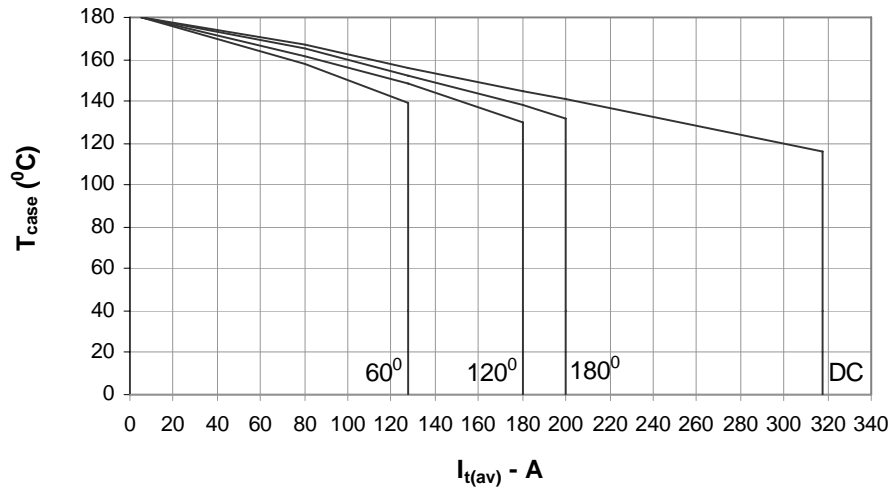
All dimensions in mm

On State Power Loss

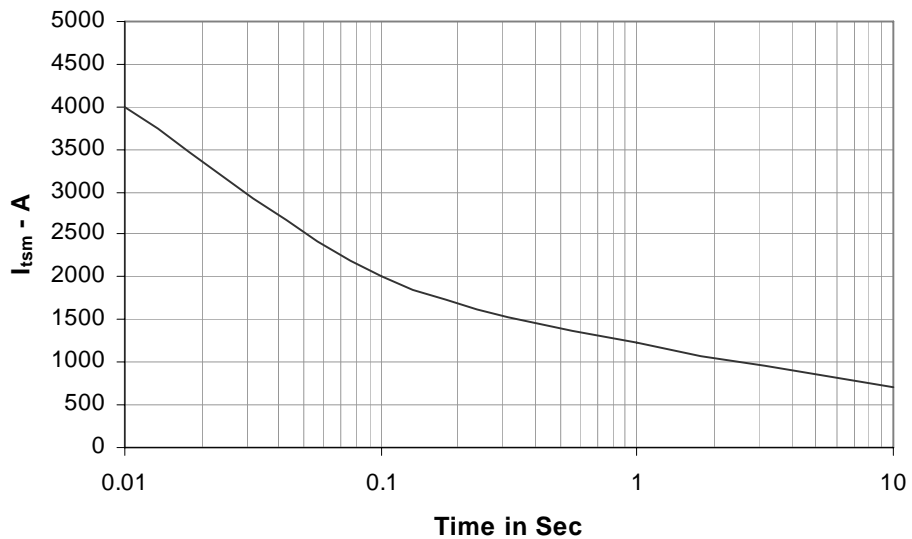


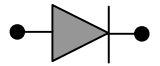


Maximum Permissible Case Temp

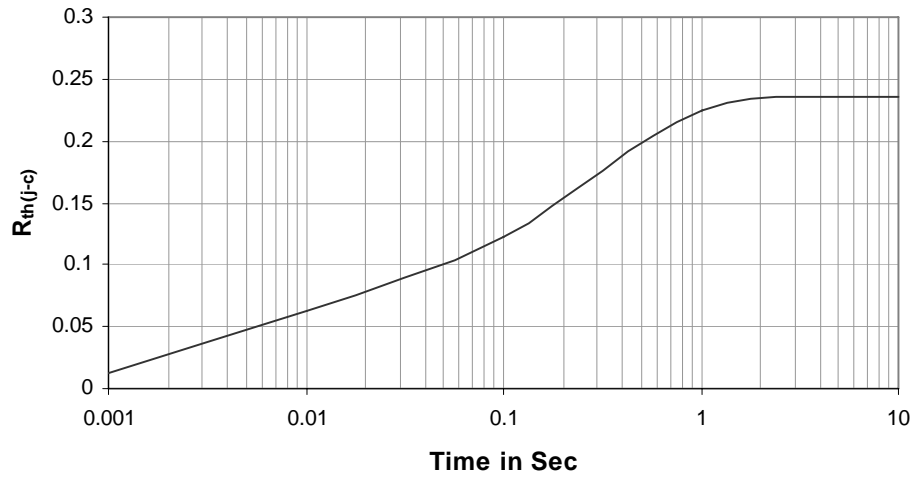


Max non repetitive Surge Current

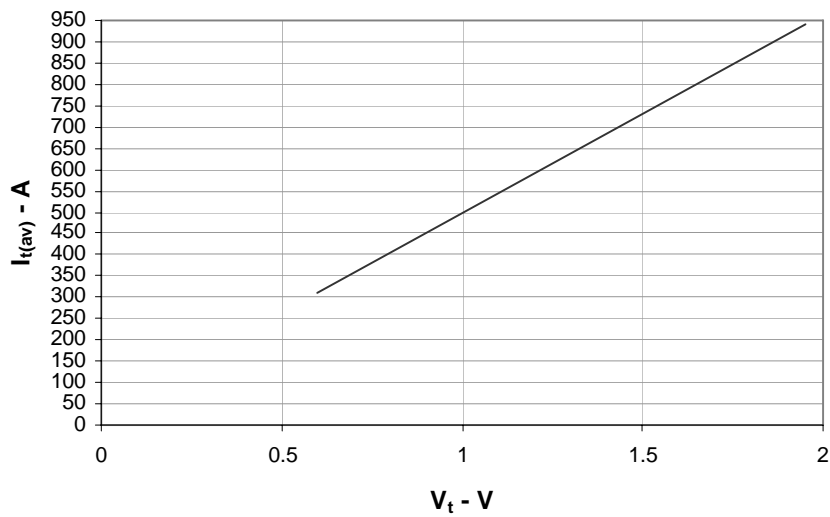




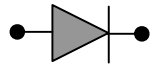
Transient Thermal Impedance Junction to Case



On State Characteristics



Rectifier Diode SXXHBN/HBR200



Ordering Information: -

| S | XX | HBN / HBR | 200 |
|--------------------------------|---|---|--------------------|
| Hirect make Rectifier Diode | $V_{RRM} = XX * 100$ e.g.12 * 100 =1200V | HBN – Normal Polarity HBR – Reverse Polarity | $I_{F(AV)} = 200A$ |

Hind Rectifiers Ltd reserves the right to change the specifications without notice.

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Hind Rectifiers Ltd

Lake Road

Bhandup (West)

Mumbai – 400 078

Tel: - +91 22 2596 8027/28/29/31

Fax: - +91 22 2596 4114

E-mail: - marketing@hirect.com

Website: - www.hirect.com

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