

HIGH EFFICIENCY POWER RECTIFIER

DESCRIPTION: 200 VOLT, 1.0 AMP ULTRA FAST RECTIFIER

FEATURES:

- Hermetically Sealed
- Metallurgically Bonded
- Ultra Fast Recovery: 40 ns max @ 25°C
- Low Reverse Leakage Current
- For High Efficiency Applications
- TX, TXV and S-Level Screening Available

MAX. RATINGS / ELECTRICAL CHARACTERISTICS All ratings are at $T_A = 25^\circ\text{C}$ unless otherwise specified

| RATING | CONDITIONS | MIN | TYP | MAX | UNIT |
|---|--|-----|-----|------|--------------------|
| Peak Inverse Voltage (PIV) | - | - | - | 200 | Vdc |
| Average DC Output Current (I_o) | $T_L = +75^\circ\text{C}$, $L = 0''$ | - | - | 1.0 | Amps |
| Peak Single Cycle Surge Current (I_{FSM}) | $t_p = 8.3$ ms Single Half Cycle Sine Wave, Superimposed On Rated Load | - | - | 35 | Amps(pk) |
| Operating and Storage Temp. (T_{OP} & T_{STG}) | - | -65 | - | +175 | $^\circ\text{C}$ |
| Breakdown Voltage (V_{BR}) | $I_R = 50 \mu\text{A}$ | 200 | | | Vdc |
| Maximum Forward Voltage (V_F) | $I_F = 1.0$ A | - | - | 0.9 | Volts |
| | $I_F = 2.0$ A (300 μsec pulse, duty cycle < 2%) | - | - | 1.0 | |
| Maximum Instantaneous Reverse Current At Rated PIV | $T_A = +25^\circ\text{C}$ | - | - | 1 | μAmps |
| | $T_A = +125^\circ\text{C}$ | - | - | 100 | |
| Reverse Recovery Time (t_{rr}) | $I_F=0.5\text{A}$, $I_R=0.5\text{A}$, $I_{RR}=0.05\text{A}$ | | | | nsec |
| | $T_A = 25^\circ\text{C}$ | - | - | 40 | |
| | $T_A = 125^\circ\text{C}$ | - | - | 150 | |
| Thermal Resistance ($R_{\theta JL}$, AXIAL) ($R_{\theta JEC}$, MELF) | Junction to Lead, $d = 0.375''$ | - | - | 36 | $^\circ\text{C/W}$ |
| | Junction to End Caps | - | - | 13 | |

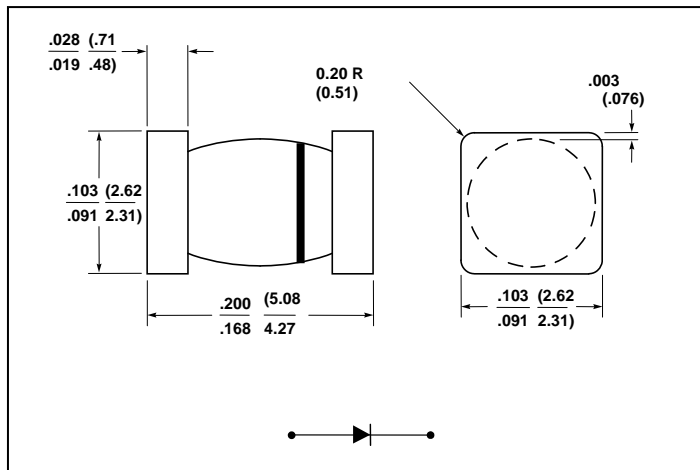
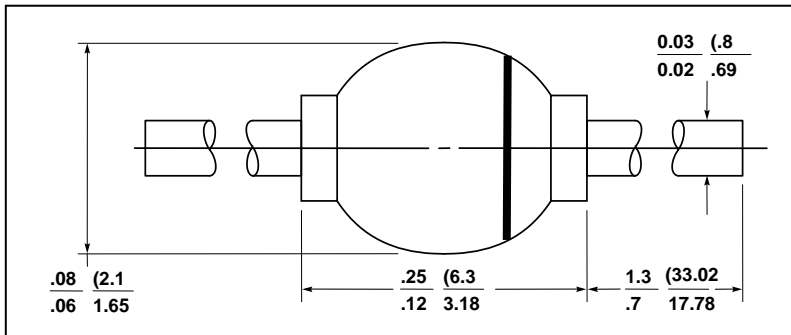
SENSITRON

SEMICONDUCTOR

SRS120HE
SRS120HEU

TECHNICAL DATA
DATA SHEET 5133, REV -

MECHANICAL DIMENSIONS In Inches / (mm), min./max.



NOTE: Cathode side of device is indicated by dark band marked on body.

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