

TECHNICAL DATA
DATA SHEET 5105, REV. A

HERMETIC POWER ULTRAFAST RECTIFIER

DESCRIPTION: A 200 VOLT, 25 AMP, HERMETIC POWER ULTRAFAST RECTIFIER IN A SHD-1/1B HP PACKAGE.

MAXIMUM RATINGS

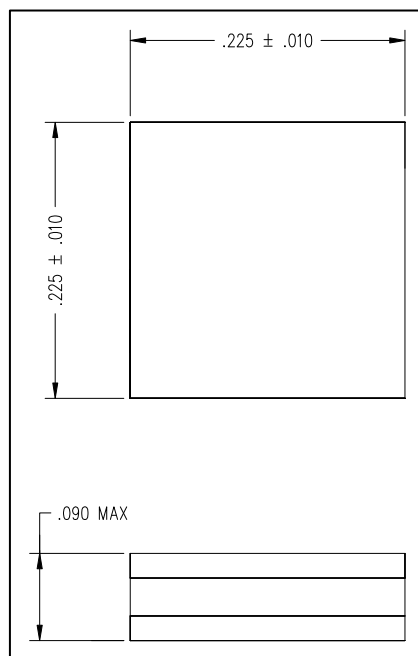
All ratings are @ $T_A = 25^\circ\text{C}$ unless otherwise specified

| RATING | SYMBOL | MAX. | UNITS |
|---|----------------|-----------------|---------------------------|
| PEAK INVERSE VOLTAGE | PIV | 200 | Volts |
| MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_C=100^\circ\text{C}$) | I_O | 25 | Amps |
| MAXIMUM REVERSE RECOVERY TIME ($I_f = 0.5\text{A}$, $I_r = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$) | t_{rr} | 35 | nsec |
| MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode) | $R\theta_{JC}$ | 0.6 | $^\circ\text{C}/\text{W}$ |
| MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE | Top/Tstg | -55 to + 150 | $^\circ\text{C}$ |

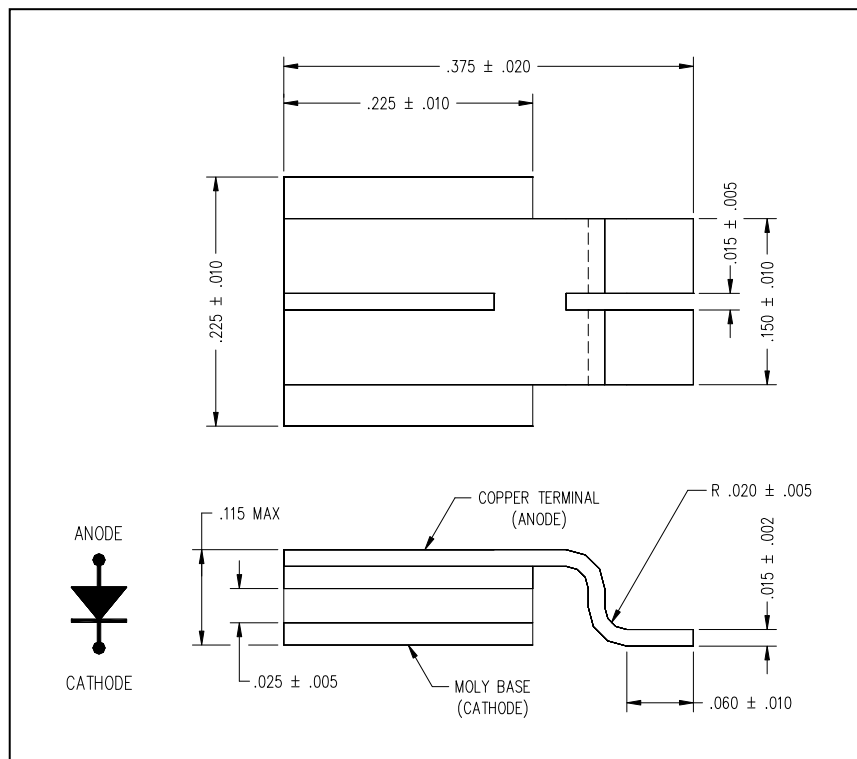
ELECTRICAL CHARACTERISTICS

| CHARACTERISTIC | | | |
|--|-------|------|---------------|
| MAXIMUM FORWARD VOLTAGE DROP, Pulsed $T_C = 25^\circ\text{C}$ ($I_f = 25\text{Amps}$) | V_f | 1.06 | Volts |
| MAXIMUM FORWARD VOLTAGE DROP, Pulsed $T_C = 125^\circ\text{C}$ ($I_f = 25\text{Amps}$) | V_f | 0.98 | Volts |
| MAXIMUM REVERSE CURRENT $T_C = 25^\circ\text{C}$ I_r @ 200 PIV | I_r | 25 | μA |
| MAXIMUM REVERSE CURRENT $T_C = 125^\circ\text{C}$ I_r @ 200 PIV | I_r | 1.0 | mA |
| CAPACITANCE $C = 25^\circ\text{C}$ $V_r = 10\text{V}$, $f = 1\text{MHz}$ | C_T | 160 | pF |

MECHANICAL DIMENSIONS: In Inches / mm



SHD-1 HP



SHD-1B HP

SENSITRON
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