

DATA SHEET 5091, REV. -

HERMETIC POWER SCHOTTKY RECTIFIER Very Low Forward Voltage Drop

DESCRIPTION: A 45-VOLT, 120 AMP, POWER SCHOTTKY RECTIFIER IN A HERMETIC CERAMIC SHD-3/3B PACKAGE.

MAXIMUM RATINGS

ALL RATINGS ARE @ $T_C = 25\text{ }^\circ\text{C}$ UNLESS OTHERWISE SPECIFIED.

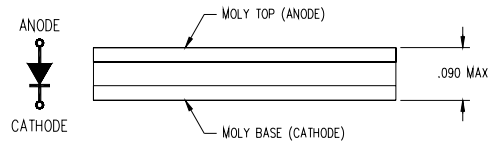
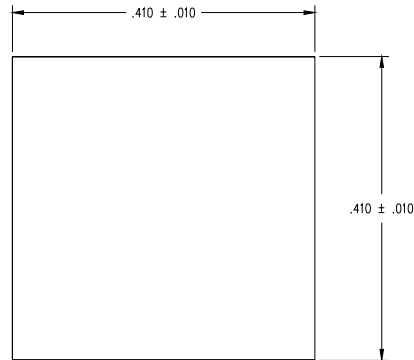
| RATING | SYMBOL | MAX. | UNITS |
|--|-----------------|-----------------|--------------------|
| PEAK INVERSE VOLTAGE | PIV | 45 | Volts |
| MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_C=100\text{ }^\circ\text{C}$) | I_O | 120 | Amps |
| MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ($t = 8.3\text{ms}$, Sine) | I_{FSM} | 1650 | Amps |
| MAXIMUM JUNCTION CAPACITANCE ($V_r=5\text{V}$) | C_T | 4800 | pF |
| MAXIMUM THERMAL RESISTANCE | $R_{\theta JC}$ | 0.20 | $^\circ\text{C/W}$ |
| MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE | Top/Tstg | -65 to + 175 | $^\circ\text{C}$ |

ELECTRICAL CHARACTERISTICS

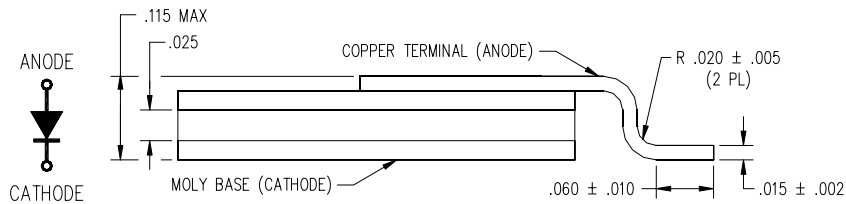
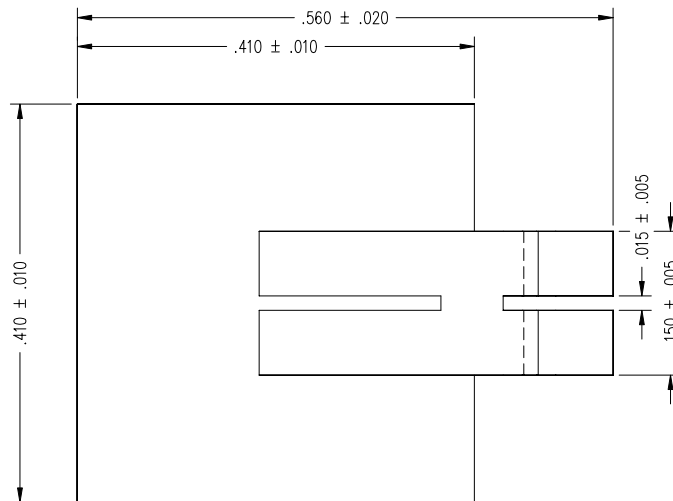
| CHARACTERISTIC | SYMBOL | MAX. | UNITS |
|---|--------|--------------|-------|
| MAXIMUM FORWARD VOLTAGE DROP, Pulsed ($I_f = 120\text{ Amps}$) $T_J = 25\text{ }^\circ\text{C}$ $T_J = 125\text{ }^\circ\text{C}$ | V_f | 0.66 0.59 | Volts |
| MAXIMUM REVERSE CURRENT (I_r @ 45V PIV) $T_J = 25\text{ }^\circ\text{C}$ $T_J = 125\text{ }^\circ\text{C}$ | I_r | 2.4 90 | mA |

TECHNICAL DATA
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MECHANICAL DIMENSIONS: In Inches / mm



SHD-3 HP



SHD-3B HP

TECHNICAL DATA
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