**Designer’s Data Sheet**

**FEATURES:**
- 100kHz Operation
- Airborne Application up to 50,000 ft
- High Efficiency
- Low EMI / Corona Discharge
- Thermally Conductive Aluminum Base Plate
- Helicoil Mounting Inserts
- ESS Screening Available. Consult Factory.
- Exterior Surfaces Sandblasted to Promote Adhesion of Encapsulation in Subsequent Assembly

**MAXIMUM RATINGS** (Per Leg, Unless Otherwise Specified)

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>$V_{RRM}$</td>
<td>2,000</td>
<td>Volts</td>
</tr>
<tr>
<td>$V_R$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$I_O$</td>
<td>2.0</td>
<td>Amps</td>
</tr>
<tr>
<td>$I_{FSM}$</td>
<td>20</td>
<td>Amps</td>
</tr>
<tr>
<td>$V_{DIEL}$</td>
<td>8,000</td>
<td>Volts</td>
</tr>
<tr>
<td>$T_{OP BASE}$</td>
<td>-45 to +100</td>
<td>°C</td>
</tr>
<tr>
<td>$T_{STG}$</td>
<td>-55 to +150</td>
<td>°C</td>
</tr>
<tr>
<td>$R_{q JC}$</td>
<td>15</td>
<td>°C/W</td>
</tr>
</tbody>
</table>

**Electrical Schematic**

**HIGH VOLTAGE DIODE BRIDGE ASSEMBLY**

5.5 kV / 2A

**NOTE:** All specifications are subject to change without notification. SCD’s for these devices should be reviewed by SSDI prior to release.

**DATA SHEET #:** PM0022B
### ELECTRICAL CHARACTERISTICS (Per Leg)

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Max</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>$V_F$</td>
<td>6.0</td>
<td>V</td>
</tr>
<tr>
<td>$I_{R1}$</td>
<td>5</td>
<td>µA</td>
</tr>
<tr>
<td>$I_{R2}$</td>
<td>25</td>
<td>µA</td>
</tr>
<tr>
<td>$C_J$</td>
<td>20</td>
<td>pF</td>
</tr>
<tr>
<td>$C_B$</td>
<td>30</td>
<td>pF</td>
</tr>
<tr>
<td>$t_{RR}$</td>
<td>35</td>
<td>nsec</td>
</tr>
</tbody>
</table>

**Max Instantaneous Forward Voltage Drop**  
($I_F = 0.75$ A, $T_C = 25^\circ$C, $300\mu$s Pulse)

**Max Reverse Leakage Current**  
($V_R = 2kV$, $T_C = 25^\circ$C)

**Max Reverse Leakage Current**  
($V_R = 2kV$, $T_C = 100^\circ$C)

**Maximum Junction Capacitance**  
($f = 1$ MHz, $V_R = 10$ V, $T_C = 25^\circ$C)

**Maximum Pin to Ground Capacitance**  
($f = 1$ MHz, $V_R = 100$ V, $T_C = 25^\circ$C)

**Maximum Reverse Recovery Time**  
($I_F = 0.5$ A, $I_R = 1.0$ A, $I_{RR} = 0.25$ A, $T_C = 25^\circ$C)

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**NOTES:**

1. Maximum forward voltage measured with instantaneous forward pulse of 300 µsec minimum.
2. For information on curves, contact the Factory Representative for Engineering Assistance

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**PACKAGE OUTLINE:**

- **TERMINAL**
- **MARKING SURFACE** (2 PLACES)
- **SLOT** .063 WIDE x .040 DEEP 2 SIDES
- **MARKING SURFACE** (2 PLACES)
- **TOLERANCES:** (UNLESS OTHERWISE SPECIFIED)
  - $XX \pm .02$
  - $XXX \pm .010$

**NOTE:**

1/ Specified Flatness and Parallelism applies to the area of 2.125 x 1.980” min.

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