

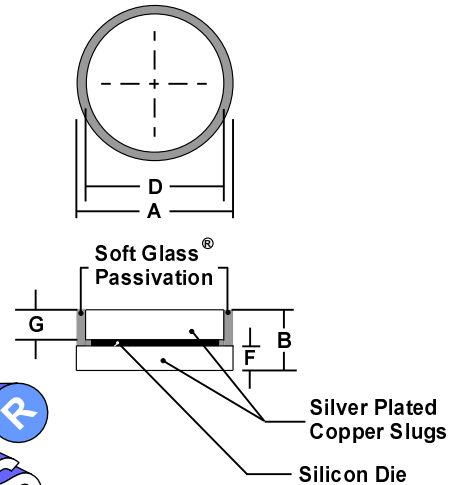
75 AMP JUMBO DIODE CELL

FEATURES

- PROPRIETARY **SOFT GLASS[®]** JUNCTION PASSIVATION FOR SUPERIOR RELIABILITY AND PERFORMANCE
- VOID FREE VACUUM DIE SOLDERING FOR MAXIMUM MECHANICAL STRENGTH AND HEAT DISSIPATION (Solder Voids: Typical $\leq 2\%$, Max. $\leq 10\%$ of Die Area)
- Large die for high power capability
- Very low forward voltage drop
- Built-in stress relief mechanism for die protection
- Silver plated substrates for easy soldering or installation
- Soldering temperature: 250 °C maximum
- Protects expensive automotive electronics and mobile equipment

MECHANICAL SPECIFICATION

*Die Size:
0.250" Diameter
Round die*



SOFT GLASS[®] DIODE

| DIM | MILLIMETERS | | INCHES | |
|-----|-------------|------|--------|-------|
| | MIN | MAX | MIN | MAX |
| A | 7.25 | 7.35 | 0.285 | 0.290 |
| B | 2.05 | 2.15 | 0.080 | 0.085 |
| D | 6.50 | 6.60 | 0.256 | 0.260 |
| F | 0.72 | 0.82 | 0.028 | 0.032 |
| G | 0.96 | 1.07 | 0.038 | 0.042 |

MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

| PARAMETER (TEST CONDITIONS) | SYMBOL | RATINGS | | | | | | | UNITS |
|---|-----------------------------------|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-------|
| | | BAR 7500D | BAR 7501D | BAR 7502D | BAR 7504D | BAR 7506D | BAR 7508D | BAR 7510D | |
| Series Number | | | | | | | | | |
| Maximum DC Blocking Voltage | V _{RRM} | | | | | | | | VOLTS |
| Maximum RMS Voltage | V _{RWM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | |
| Maximum Peak Recurrent Reverse Voltage | V _{DC} | | | | | | | | |
| Non-repetitive Peak Reverse Voltage (Half wave, single phase, 60 Hz peak) | V _{RSM} | 60 | 120 | 240 | 480 | 720 | 960 | 1200 | |
| Average Forward Rectified Current @ T _c =125 °C | I _O | 75 | | | | | | | AMPS |
| Peak Forward Surge Current (8.3mS single half sine wave superimposed on rated load) | I _{FSM} | 800 | | | | | | | |
| Maximum Forward Voltage Drop at 75 Amp DC | V _{FM} | 1.1 (1.05 Typical) | | | | | 1.15 | | VOLTS |
| Maximum Average DC Reverse Current @ T _A = 25 °C At Rated DC Blocking Voltage @ T _A = 125 °C | I _{RM} | 2 50 | | | | | | | μA |
| Maximum Thermal Resistance, Junction to Case (Note 1) | R _{θJC} | 0.8 | | | | | | | °C/W |
| Junction Operating and Storage Temperature Range | T _J , T _{STG} | -65 to +175 | | | | | | | °C |

Notes: 1) Single Side Cooled

BAR756