

75 AMP JUMBO DIODE CELL

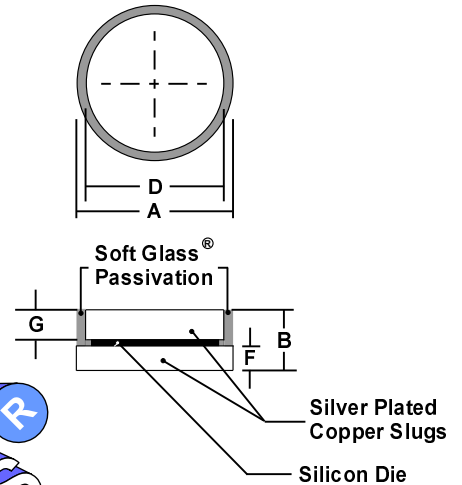
FEATURES

- 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

SOFT GLASS®
DIODE

MECHANICAL SPECIFICATION

*Die Size:
0.250" Diameter
Round die*



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