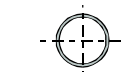


50 AMP JUMBO DIODE CELL

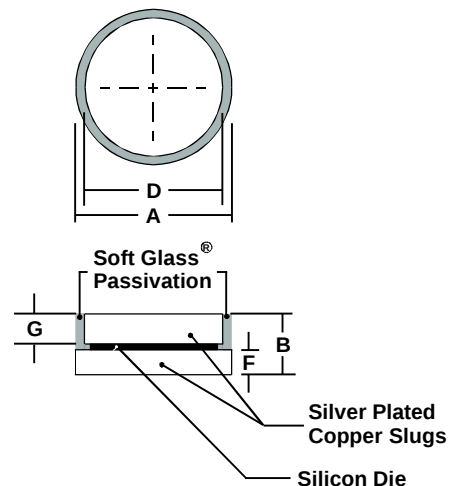
FEATURES

- 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:
0.180" x 0.180"
Square



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
Series Number		BAR 5000D	BAR 5001D	BAR 5002D	BAR 5004D	BAR 5006D	BAR 5008D	BAR 5010D		
Maximum DC Blocking Voltage	V _{RRM}	50	100	200	400	600	800	1000	VOLTS	
Maximum RMS Voltage	V _{RWM}									
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	50								AMPS
Peak Forward Surge Current (8.3mS single half sine wave superimposed on rated load)	I _{FSM}	720								
Repetitive Peak Reverse Surge Current (Half wave, single phase, 60 Hz applied to rated load)	I _{RSM}	120								
Maximum Instantaneous Forward Voltage Drop (I _F =100A @300 μSec Pulse, T _C =25 °C)	V _{FM}	1.1 (1.05 Typical)						1.2		VOLTS
Maximum Average DC Reverse Current @ T _A = 25 °C	I _{RM}	2								μA
At Rated DC Blocking Voltage @ T _A = 125 °C		50								
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

5.00 Rev0505d