

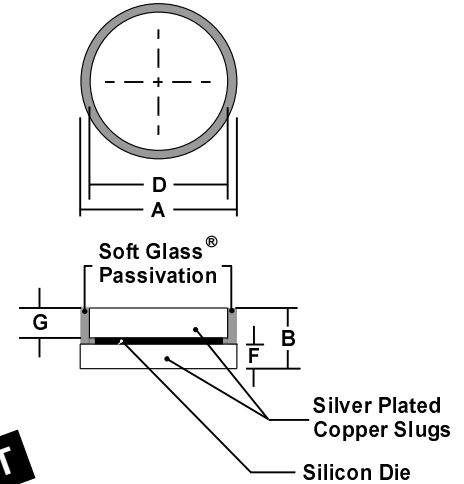
## 35 AMP SOZA DIODE CELLS

### FEATURES

- PROPRIETARY **SOFT GLASS<sup>®</sup>** JUNCTION PASSIVATION FOR SUPERIOR RELIABILITY AND PERFORMANCE
- VOID FREE VACUUM DIE SOLDERING FOR MAXIMUM MECHANICAL STRENGTH AND HEAT DISSIPATION (Solder Voids: Typical < 2%, Max. < 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" Diameter  
Round*



RoHS COMPLIANT

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	5.33	5.46	0.210	0.215
B	2.03	2.16	0.080	0.085
D	4.70	4.83	0.185	0.190
F	0.64	0.76	0.025	0.030
G	0.96	1.09	0.038	0.043

### MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

PARAMETER (TEST CONDITIONS)	SYMBOL	RATINGS								UNITS
		BAR 3501D	BAR 3502D	BAR 3504D	BAR 3506D	BAR 3508D	BAR 3510D	BAR 3512D		
Series Number										
Maximum DC Blocking Voltage	V <sub>RRM</sub>	100	200	400	600	800	1000	1200		VOLTS
Maximum RMS Voltage	V <sub>RMS</sub>	70	140	280	420	560	700	840		
Maximum Peak Recurrent Reverse Voltage	V <sub>RRM</sub>	100	200	400	600	800	1000	1200		
Average Rectified Forward Current (Single phase, Resistive load, 60Hz)	I <sub>o</sub>	35								AMPS
Non-repetitive Peak Forward Surge Current (Half wave, Single phase, 60Hz sine applied to rated load)	I <sub>FSM</sub>	500								
Maximum Forward Voltage @ 35 Amp DC	V <sub>F</sub>	1.1 (1.05 Typical)					1.15			VOLTS
Maximum DC Reverse Current @ T <sub>c</sub> = 25 °C At Rated DC Blocking Voltage @ T <sub>c</sub> = 100 °C	I <sub>R</sub>					0.5				μA
Maximum Thermal Resistance, Junction to Lead (Note 1)	R <sub>θJC</sub>	0.9								°C/W
Operating & Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +175								°C

Notes: 1) Single Side Cooled