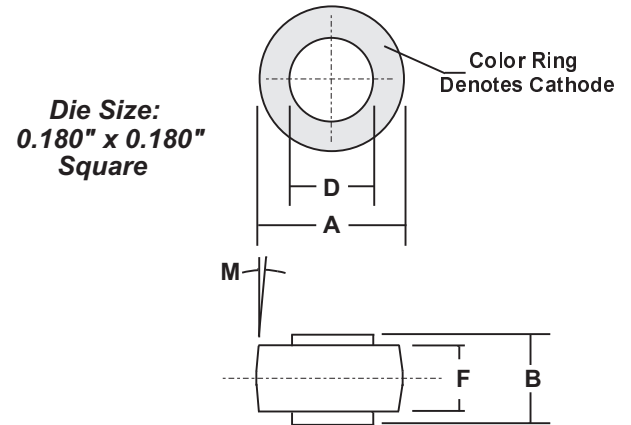


## 35 AMP BUTTON DIODES (GPP Dice)

### Mechanical Specification

- Void Free Vacuum Die Soldering For Maximum Mechanical Strength and Heat Dissipation (Solder Voids: Typical  $\leq 2\%$ , Max.  $\leq 10\%$  of Die Area)
- Biggest Effective Die Area for the 35 Amp Class of Button Diodes
- Quality Glass Passivated Die With Very Low Reverse Leakage
- High Temperature Solder (Solidus 287°C, Liquidus 296°C) to Allow Higher Operating And Assembly Temperatures
- Copper Headers Are Nickel Plated For Easy Soldering And Superior Solder Joints



### Mechanical Data

- Case: Molded Epoxy (UL Flammability Rating 94V-0)
- Finish: All Metal Surfaces Are Nickel Plated
- Soldering Temperature: 280 °C maximum
- Mounting Position: Any
- Polarity: Color band denotes cathode
- Weight: 0.6 Ounces (1.8 Grams)

**RoHS COMPLIANT**

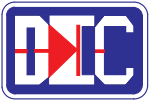
Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	8.43	8.69	0.332	0.342
B	5.94	6.25	0.234	0.246
D	5.46	5.71	0.215	0.225
F	4.19	4.45	0.165	0.175
M	5° NOM		5° NOM	

### Maximum Ratings & Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter (Test Conditions)	Symbol	Ratings							Units
		BAR 3500G	BAR 3501G	BAR 3502G	BAR 3504G	BAR 3506G	BAR 3508G	BAR 3510G	
Series Number									
Maximum DC Blocking Voltage	VRRM								Volts
Maximum RMS Voltage	VRWM	50	100	200	400	600	800	1000	
Maximum Peak Recurrent Reverse Voltage	V <sub>DC</sub>								
Non-repetitive Peak Reverse Voltage (Half wave, single phase, 60 Hz peak)	VRSM	60	120	240	480	720	960	1200	
Average Forward Rectified Current @ T <sub>c</sub> =150 °C	I <sub>O</sub>	35							Amps
Peak Forward Surge Current (8.3ms single half sine wave superimposed on rated load)	I <sub>FSM</sub>	450							
Maximum Forward Voltage Drop at 35 Amp DC	V <sub>FM</sub>	1.1 (Typical 1.05)					1.15		Volts
Maximum Average DC Reverse Current @ T <sub>A</sub> = 25 °C	I <sub>RM</sub>	1							μA
At Rated DC Blocking Voltage @ T <sub>A</sub> = 100 °C		50							
Maximum Thermal Resistance, Junction to Case (Note 1)	R <sub>θJC</sub>	0.9							°C/W
Junction Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +175							°C

Notes: 1) Single Side Cooled



## 35 AMP BUTTON DIODES (GPP Dice)

### RATING & CHARACTERISTIC CURVES FOR SERIES BAR3500G - BAR3510G

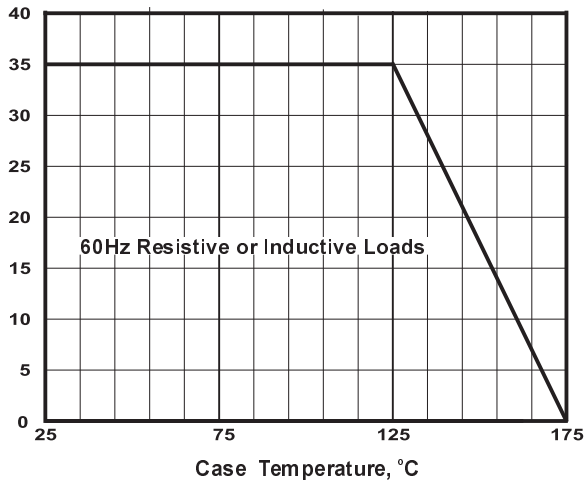


FIGURE 1. FORWARD CURRENT DERATING CURVE

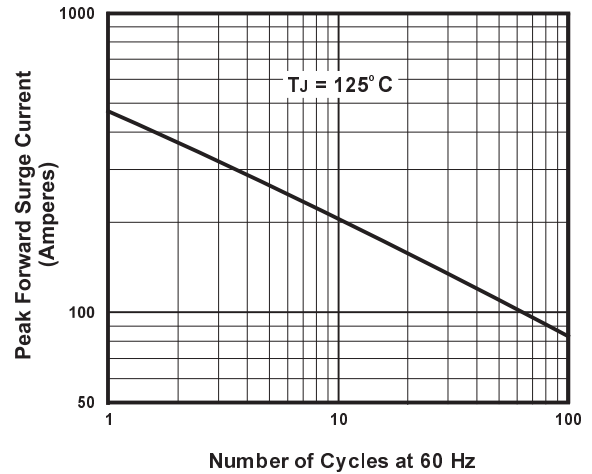


FIGURE 2. MAXIMUM NON-REPETITIVE SURGE CURRENT

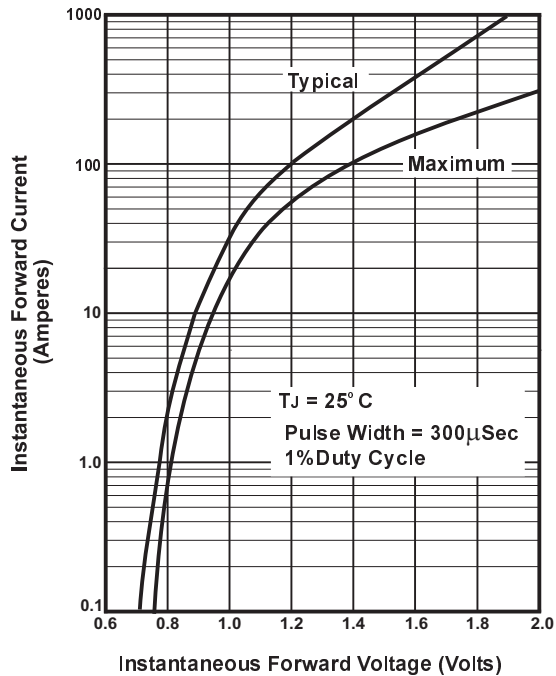


FIGURE 3. TYPICAL FORWARD CHARACTERISTIC PER DIODE

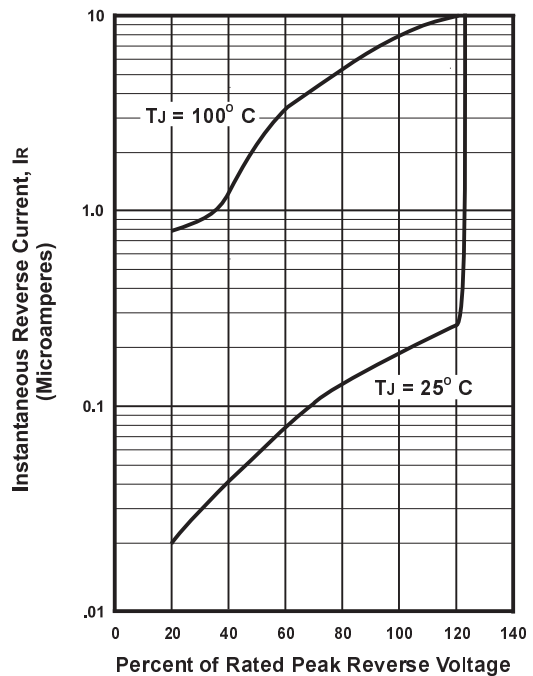


FIGURE 4. TYPICAL REVERSE CHARACTERISTICS