

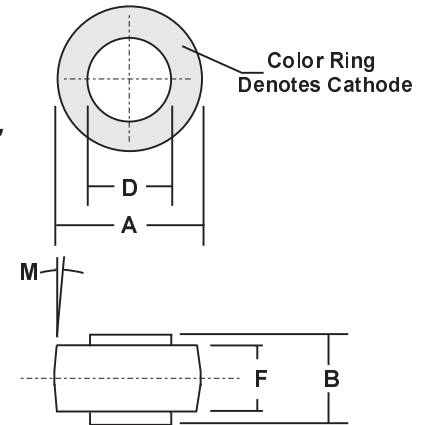
## 35 AMP BUTTON DIODES

### Features

- 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
- High Temperature Solder (Solidus  $287^{\circ}\text{C}$ , Liquidus  $296^{\circ}\text{C}$ ) to Allow Higher Operating And Assembly Temperatures
- Copper Headers Are Silver Plated For Easy Soldering And Superior Solder Joints

### Mechanical Specification

Die Size:  
 $0.180'' \times 0.180''$   
 Square



### Mechanical Data

- Case: Molded Epoxy (UL Flammability Rating 94V-0)
- Finish: All Metal Surfaces Are Silver Plated
- Soldering Temperature:  $250^{\circ}\text{C}$  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  $25^{\circ}\text{C}$  ambient temperature unless otherwise specified.

Parameter (Test Conditions)	Symbol	Ratings							Units
		BAR 3500S	BAR 3501S	BAR 3502S	BAR 3504S	BAR 3506S	BAR 3508S	BAR 3510S	
Series Number									
Maximum DC Blocking Voltage	VRRM								Volts
Maximum RMS Voltage	VRWM	50	100	200	400	600	800	1000	
Maximum Peak Recurrent Reverse Voltage	VDC								
Non-repetitive Peak Reverse Voltage (Half wave, single phase, 60 Hz peak)	VRSM	60	120	240	480	720	960	1200	
Average Forward Rectified Current @ $T_c=150^{\circ}\text{C}$	IO	35							Amps
Peak Forward Surge Current (8.3ms single half sine wave superimposed on rated load)	IFSM	500							
Maximum Forward Voltage Drop at 35 Amp DC	VFM	1.1 (Typical 1.05)					1.15		Volts
Maximum Average DC Reverse Current @ $T_A = 25^{\circ}\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^{\circ}\text{C}$	IRM	1 50							$\mu\text{A}$
Maximum Thermal Resistance, Junction to Case (Note 1)	R $\theta$ JC	0.9							$^{\circ}\text{C}/\text{W}$
Junction Operating and Storage Temperature Range	TJ, TSTG	-65 to +175							$^{\circ}\text{C}$

Notes: 1) Single Side Cooled

BAR35s