

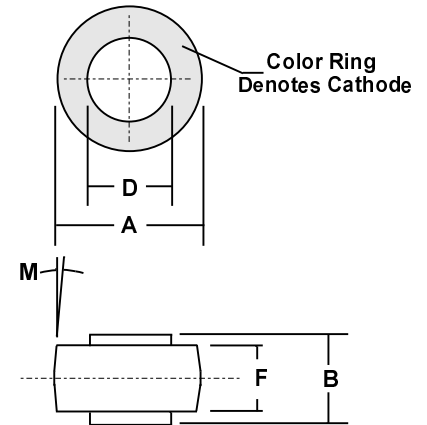
## 60 AMP BUTTON DIODES

### 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)
- Compact molded design
- High surge current, 800 A @  $T_J = 175^\circ\text{C}$
- Low cost
- Peak performance at elevated temperatures: 60 A @  $T_J = 150^\circ\text{C}$

### MECHANICAL SPECIFICATION

Die Size:  
0.216" Flat to Flat  
Hex



### MECHANICAL DATA

- Case: Transfer molded plastic
- Finish: All external surfaces are corrosion resistant and the contact areas are readily solderable
- Soldering Temperature: 250 °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 6000S	BAR 6001S	BAR 6002S	BAR 6004S	BAR 6006S	BAR 6008S	BAR 6010S	
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 @ $T_c=125^\circ\text{C}$	$I_O$	60							AMPS
	$I_{FSM}$	700							
Maximum Instantaneous Forward Voltage Drop at 60 Amp DC	$V_{FM}$	1.1 (1.05 Typical)					1.15		VOLTS
Maximum Average DC Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	$I_{RM}$	1 50							$\mu\text{A}$
Maximum Thermal Resistance, Junction to Case (Note 1)	$R_{\theta JC}$	0.8							$^\circ\text{C/W}$
Junction Operating and Storage Temperature Range	$T_J, T_{STG}$	-65 to +175							$^\circ\text{C}$

Notes: 1) Single Side Cooled

BAR006