

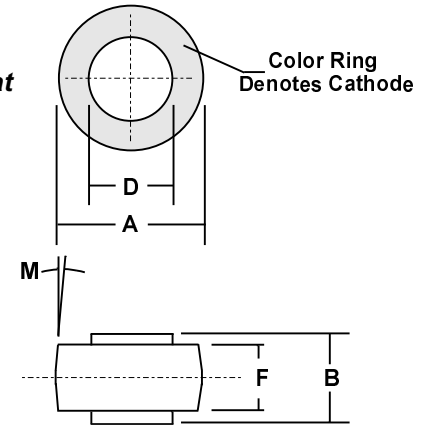
## 60 AMP BUTTON DIODES

### 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<sub>J</sub> = 175 °C
- Low cost
- Peak performance at elevated temperatures: 60 A @ T<sub>J</sub> = 150 °C

### MECHANICAL SPECIFICATION

*Die Size:  
0.216" Flat to Flat  
Hex*



### MECHANICAL DATA

- Case: Molded Epoxy (UL Flammability Rating 94V-0)
- 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	9.78	10.29	0.385	0.405
B	6.05	6.20	0.238	0.244
D	5.54	6.60	0.218	0.220
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 6000	BAR 6001	BAR 6002	BAR 6004	BAR 6006	BAR 6008	BAR 6010		
Series Number										
Maximum DC Blocking Voltage	V <sub>RRM</sub>									VOLTS
Maximum RMS Voltage	V <sub>RWM</sub>	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)	V <sub>RSM</sub>	60	120	240	480	720	960	1200		
Average Forward Rectified Current @ T <sub>c</sub> =125 °C	I <sub>O</sub>	60								AMPS
Peak Forward Surge Current (8.3mS single half sine wave superimposed on rated load)	I <sub>FSM</sub>	700								
Maximum Instantaneous Forward Voltage Drop at 60 Amp DC	V <sub>FM</sub>	1.1 (1.05 Typical)					1.15			VOLTS
Maximum Average DC Reverse Current @ T <sub>A</sub> = 25 °C At Rated DC Blocking Voltage @ T <sub>A</sub> = 125 °C	I <sub>RM</sub>	1 50								μA
Maximum Thermal Resistance, Junction to Case (Note 1)	R <sub>θJC</sub>	0.8								°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