

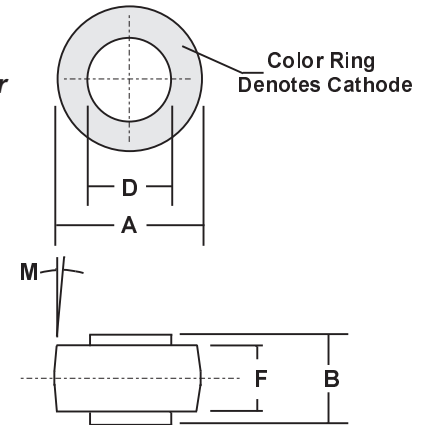
75 AMP BUTTON DIODES

Features

- Void Free Vacuum Die Soldering For Maximum Mechanical Strength and Heat Dissipation (Solder Voids: Typical $\leq 2\%$, Max. $\leq 10\%$ of Die Area)
- Unique Round Die (1/4" Dia.) For Highest Current And Power Handling Capability in Existing Standard Molded Button Package
- High Temperature Solder (Solidus 287°C, Liquidus 296°C) to Allow Higher Operating And Assembly Temperatures
- Copper Headers Are Silver Plated For Easy Soldering And Superior Solder Joints

Mechanical Specification

Die Size:
0.250" Diameter
Round



Mechanical Data

- Case: Molded Epoxy (UL Flammability Rating 94V-0)
- Finish: All Metal Surfaces Are Silver Plated
- 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 | 5.97 | 6.35 | 0.235 | 0.250 |
| 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 7500 | BAR 7501 | BAR 7502 | BAR 7504 | BAR 7506 | BAR 7508 | BAR 7510 | |
| 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 @ Tc=150 °C | IO | 75 | | | | | | | Amps |
| Peak Forward Surge Current (8.3ms single half sine wave superimposed on rated load) | IFSM | 800 | | | | | | | |
| Maximum Forward Voltage Drop at 75 Amp DC | VFM | 1.1 (Typical 1.05) | | | | | 1.15 | | Volts |
| Maximum Average DC Reverse Current @ TA = 25 °C At Rated DC Blocking Voltage @ TA = 100 °C | IRM | 1 50 | | | | | | | µA |
| Maximum Thermal Resistance, Junction to Case (Note 1) | RθJC | 0.8 | | | | | | | °C/W |
| Junction Operating and Storage Temperature Range | TJ, TSTG | -65 to +175 | | | | | | | °C |

Notes: 1) Single Side Cooled