

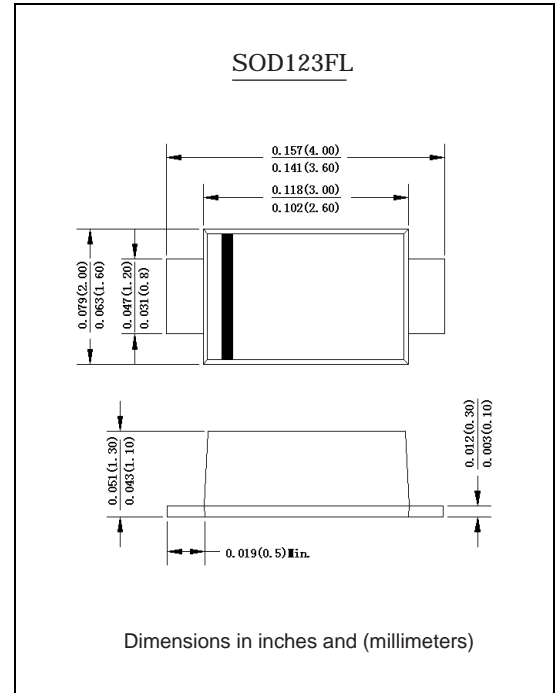
## MBR0520~MBR05200 0.5Amp Surface Mount Schottky Barrier Rectifiers

### Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Low reverse leakage
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:  
250°C/10 seconds at terminals

### Mechanical Data

Case: JEDEC SOD123FL molded plastic body  
 Terminals: Solder plated, solderable per MIL-STD-750, Method 2026  
 Polarity: Color band denotes cathode end  
 Mounting Position: Any  
 Weight : 0.0007 ounce, 0.02 grams



### Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

|   | SYMBOLS                           | MBR 0520    | MBR 0540 | MBR 0560 | MBR 0580 | MBR 05100 | MBR 05150 | MBR 05200 | UNITS |
|---|-----------------------------------|-------------|----------|----------|----------|-----------|-----------|-----------|-------|
|   | Mark Code                         | T2          | T4       | T6       | T8       | TA        | TB        | TC        |       |
| Maximum repetitive peak reverse voltage   | V <sub>RRM</sub>                  | 20          | 40       | 60       | 80       | 100       | 150       | 200       | VOLTS |
| Maximum RMS voltage   | V <sub>RMS</sub>                  | 14          | 21       | 28       | 56       | 70        | 105       | 150       | VOLTS |
| Maximum DC blocking voltage   | V <sub>DC</sub>                   | 20          | 40       | 60       | 80       | 100       | 150       | 200       | VOLTS |
| Maximum average forward rectified current at T <sub>L</sub> =110°C                                  | I <sub>(AV)</sub>                 | 0.5         |          |          |          |           |           |           | Amp   |
| Peak forward surge current<br>8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I <sub>FSM</sub>                  | 30.0        |          |          |          |           |           |           | Amps  |
| Maximum instantaneous forward voltage at 0.5A   | V <sub>F</sub>                    | 0.55        | 0.70     | 0.85     | 0.95     |           |           |           | Volts |
| Maximum DC reverse current<br>at rated DC blocking voltage  | I <sub>R</sub>                    | 0.5         |          |          |          |           | 0.1       |           | mA    |
|   |                                   | 20.0        |          | 10.0     |          | 2.0       |           |           |       |
| Typical thermal resistance (NOTE 1)   | R <sub>θJA</sub>                  | 88.0        |          |          |          |           |           |           | C/W   |
| Operating junction and storage temperature range  | T <sub>J</sub> , T <sub>STG</sub> | -55 to +150 |          |          |          |           |           |           | °C    |

Note: 1.P.C.B. mounted with 5.0x5.0mm copper pad areas