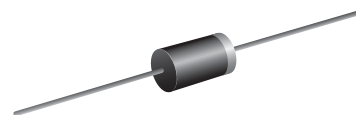


**VOLTAGE RANGE: 400 - 1000V**  
**CURRENT: 1.0 A**

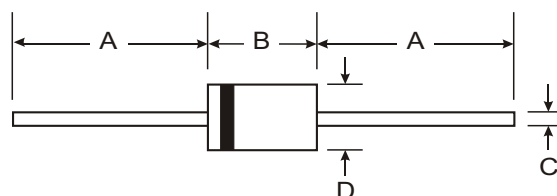


### Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

### Mechanical Data

- Case: DO - 41 Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.34 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



| DO-41                |       |       |
|----------------------|-------|-------|
| Dim                  | Min   | Max   |
| A                    | 25.40 | —     |
| B                    | 4.06  | 5.21  |
| C                    | 0.71  | 0.864 |
| D                    | 2.00  | 2.72  |
| All Dimensions in mm |       |       |

### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| Characteristic  | Symbol   | BA157       | BA158 | BA159 | Unit |
|---|--|-------------|-------|-------|------|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage                                | V <sub>RRM</sub><br>V <sub>RWM</sub><br>V <sub>R</sub> | 400         | 600   | 1000  | V    |
| RMS Reverse Voltage   | V <sub>R(RMS)</sub>                                    | 280         | 420   | 700   | V    |
| Average Rectified Output Current<br>(Note 1) @T <sub>A</sub> = 55°C   | I <sub>O</sub>   | 1.0         |       |       | A    |
| Non-Repetitive Peak Forward Surge Current<br>8.3ms Single half sine-wave superimposed on<br>rated load (JEDEC Method) | I <sub>FSM</sub>                                       | 30          |       |       | A    |
| Forward Voltage @I <sub>F</sub> = 1.0A  | V <sub>FM</sub>  | 1.2         |       |       | V    |
| Peak Reverse Current @T <sub>A</sub> = 25°C<br>At Rated DC Blocking Voltage @T <sub>A</sub> = 100°C                   | I <sub>RM</sub>  | 5.0<br>100  |       |       | μA   |
| Reverse Recovery Time (Note 2)  | t <sub>rr</sub>  | 150         | 250   | 500   | nS   |
| Typical Junction Capacitance (Note 3)   | C <sub>j</sub>   | 15          |       |       | pF   |
| Operating Temperature Range   | T <sub>j</sub>   | -65 to +125 |       |       | °C   |
| Storage Temperature Range   | T <sub>STG</sub>                                       | -65 to +150 |       |       | °C   |

- Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case  
 2. Measured with I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>RR</sub> = 0.25A. See figure 5.  
 3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

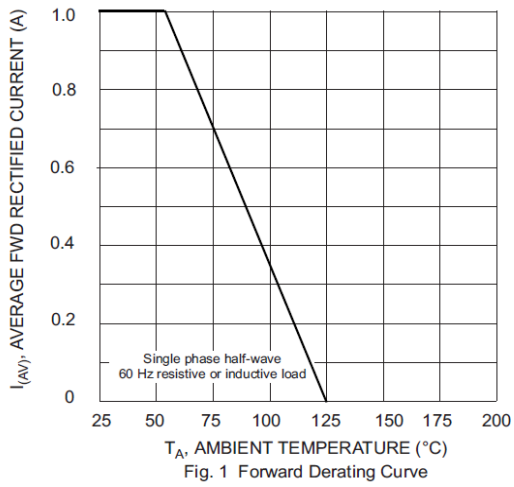


Fig. 1 Forward Derating Curve

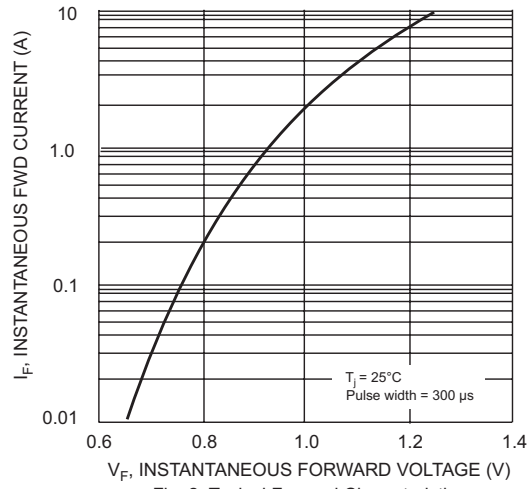


Fig. 2 Typical Forward Characteristics

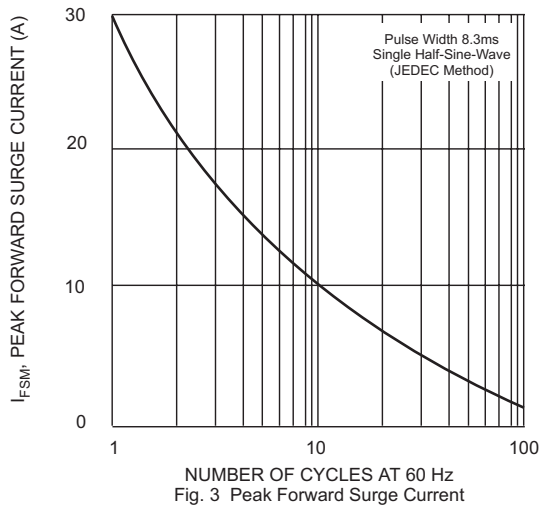


Fig. 3 Peak Forward Surge Current

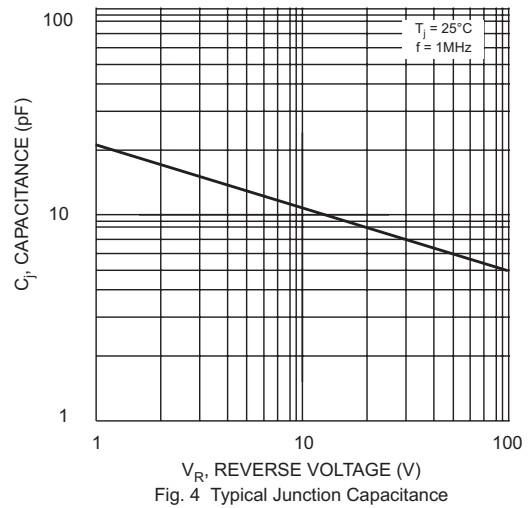
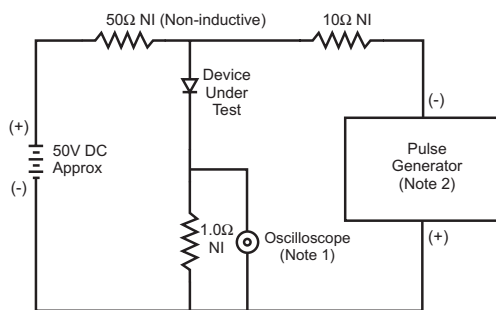


Fig. 4 Typical Junction Capacitance



- Notes:
1. Rise Time = 7.0ns max. Input Impedance = 1.0M $\Omega$ , 22pF.
  2. Rise Time = 10ns max. Input Impedance = 50 $\Omega$ .

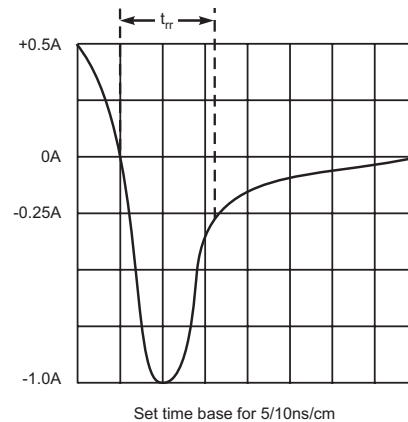


Fig. 5 Reverse Recovery Time Characteristic and Test Circuit

单击下面可查看定价，库存，交付和生命周期等信息

[>>SUNMATE\(森美特\)](#)