

## SURFACT MOUNT SWITCHING DIODES

**VOLTAGE** 75-200 Volts

**POWER** 200 mWatts

**PACKAGE** SOD-323

### FEATURES

- Fast switching speed.
- Surface mount package Ideally Suited for Automatic insertion
- Electrically Identical to Standard JEDEC
- High Conductance

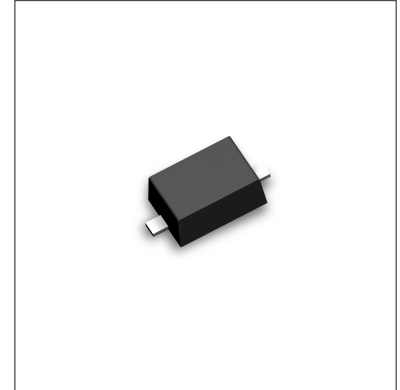
### MECHANICAL DATA

Case: SOD-323, Plastic

Terminals: Solderable per MIL-STD-202, Method 208

Approx. Weight: 0.008 gram

Marking: A6, A8, A80, A82



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

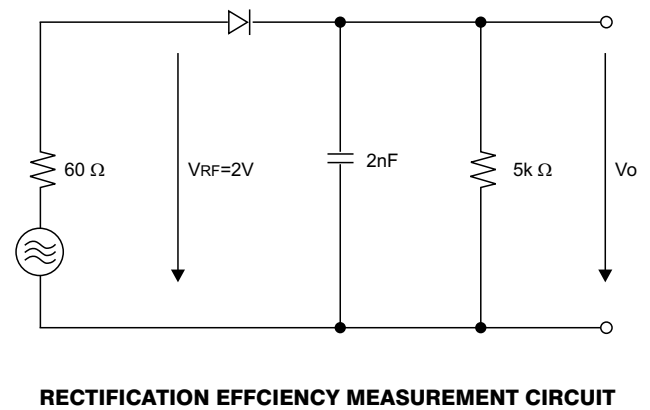
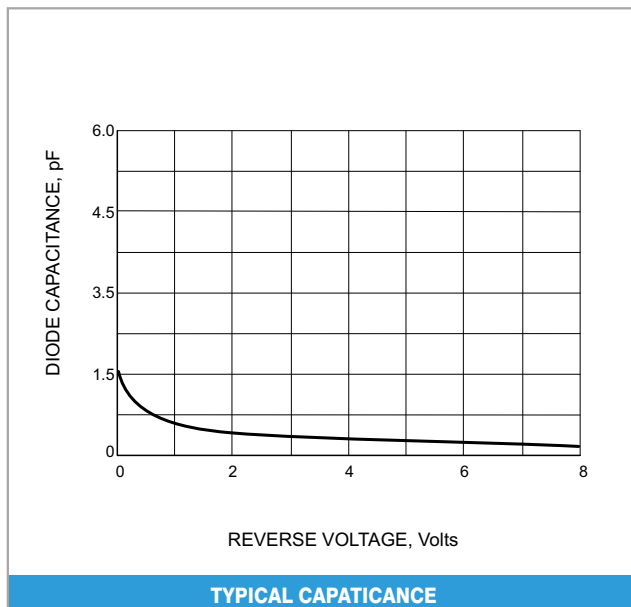
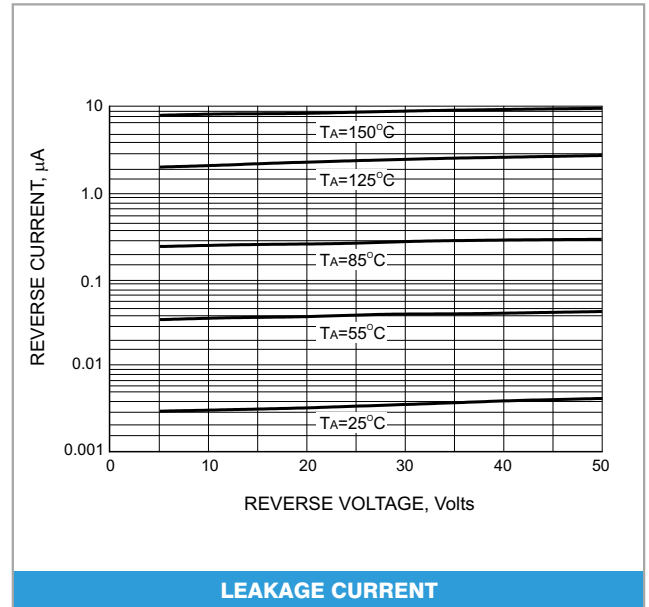
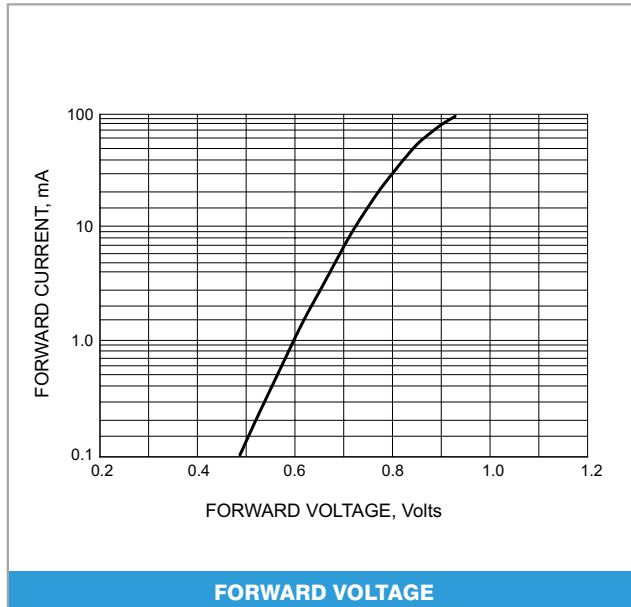
For capacitive load, derate current by 20%.

| PARAMETER   | SYMBOL           | BAV16WS                          | BAV19WS | BAV20WS | BAV21WS | UNITS  |
|---|------------------|----------------------------------|---------|---------|---------|--------|
| Reverse Voltage   | V <sub>R</sub>   | 75                               | 100     | 150     | 200     | V      |
| Peak Reverse Voltage  | V <sub>RM</sub>  | 100                              | 120     | 200     | 250     | V      |
| Rectified Current (Average), Half Wave Rectification with Resistive Load and f >=50 Hz            | I <sub>o</sub>   | 250                              | 200     | 200     | 200     | mA     |
| Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | I <sub>FSM</sub> | 2.0                              | 2.5     | 2.5     | 2.5     | A      |
| Power Dissipation Derate Above 25°C   | P <sub>TOT</sub> | 200                              | 200     | 200     | 200     | mW     |
| Maximum Forward Voltage @ I <sub>F</sub> =100 mA  | V <sub>F</sub>   | 0.855<br>@ I <sub>F</sub> =10 mA | 1.0     | 1.0     | 1.0     | V      |
| Maximum DC Reverse Current at Rated DC Blocking Voltage T <sub>J</sub> = 25°C                     | I <sub>R</sub>   | 1.0                              | 0.1     | 0.1     | 0.1     | μA     |
| Typical Junction Capacitance( Notes1)   | C <sub>J</sub>   | 2.0                              | 1.5     | 1.5     | 1.5     | pF     |
| Maximum Reverse Recovery (Notes2)   | T <sub>RR</sub>  | 6.0                              | 50      | 50      | 50      | ns     |
| Maximum Thermal Resistance  | R <sub>θJA</sub> | 357                              |         |         |         | °C / W |
| Storage Temperature Range   | T <sub>J</sub>   | -55 TO +125                      |         |         |         | °C     |

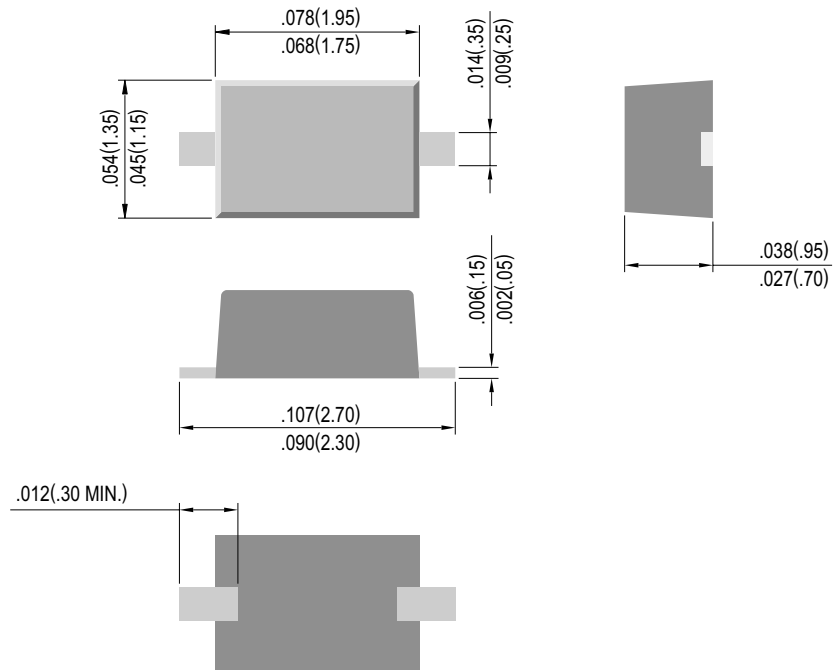
NOTE:

1. C<sub>J</sub> at V<sub>R</sub>=0, f=1MHZ

2. From I<sub>F</sub>=10mA to I<sub>R</sub>=1mA, V<sub>R</sub>=6Volts, R<sub>L</sub>=100Ω



**SOD-323**



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