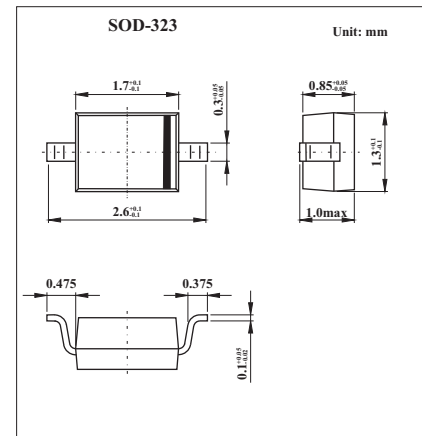


Surface Mount Schottky Barrier Diode

KB160M-20

■ Features

- Low Power Loss, High Efficiency
- High Surge Capability
- High Current Capability and Low Forward Voltage Drop

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Rating | Unit |
|---|-----------------------------------|------------|------|
| Peak repetitive Peak reverse voltage | VRRM | | |
| Working Peak Reverse Voltage | VRWM | 20 | V |
| DC Blocking Voltage | VR | | |
| RMS Reverse Voltage | VR(RMS) | 14 | V |
| Average Rectified Output Current (Note 1) @ $T_L = 90^\circ\text{C}$ | I _o | 1 | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 25 | A |
| Forward Voltage @ $I_F = 1.0\text{A}$ | V _F | 0.45 | V |
| @ $I_F = 3.0\text{A}$ | | 0.75 | |
| Peak Reverse Current @ $T_A = 25^\circ\text{C}$ | I _R | 1 | mA |
| At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$ | | 10 | |
| Thermal Resistance Junction to Ambient | R _{θJA} | 500 | °C/W |
| Operating and Storage Temperature Range | T _j , T _{STG} | -65 to 150 | °C |

Note: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.

■ Marking

| | |
|---------|----|
| Marking | SJ |
|---------|----|

KB160M-20

Typical Characteristics

Fig. 1 - Forward Current Derating Curve

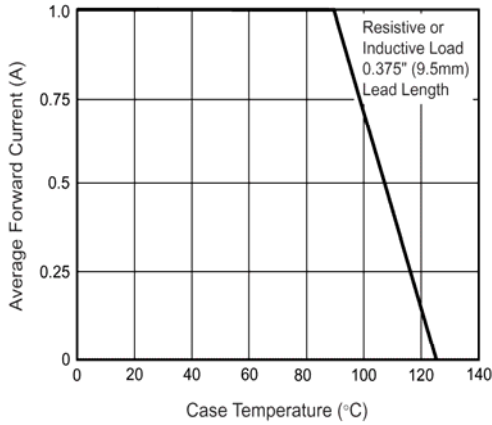


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

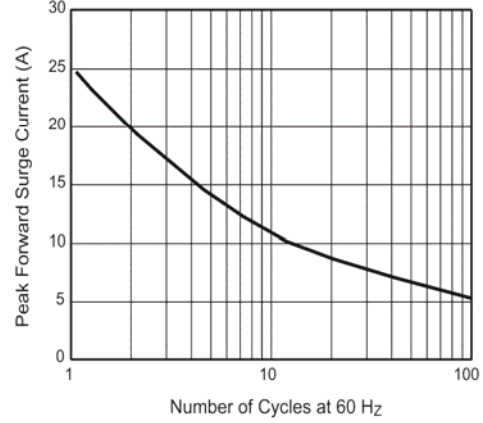


Fig. 3 - Typical Instantaneous Forward Characteristics

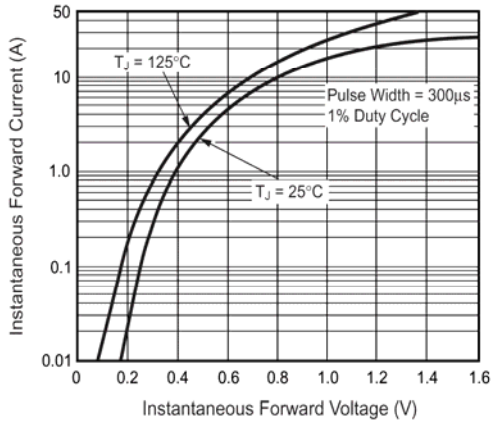


Fig. 4 - Typical Reverse Characteristics

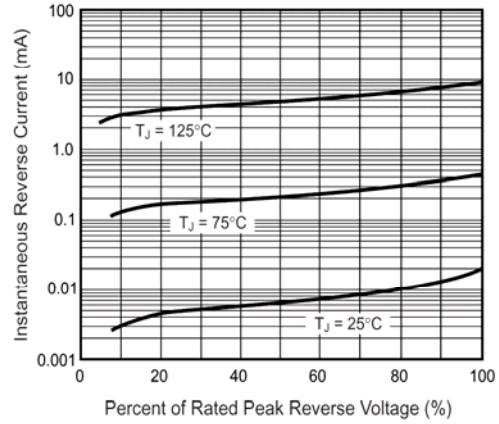


Fig. 5 - Typical Junction Capacitance

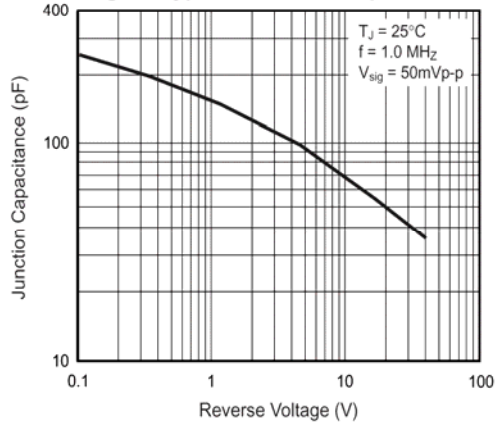


Fig. 6 - Typical Transient Thermal Impedance

