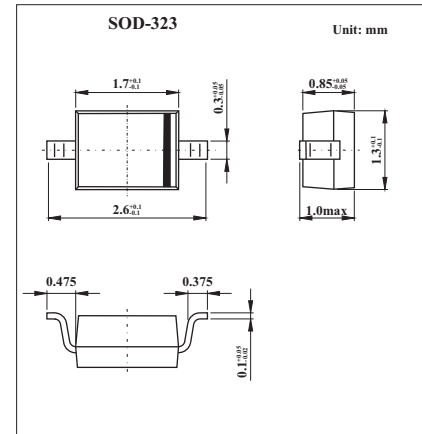


## Surface Mount Schottky Barrier Diode

## 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 <sub>o</sub>	1	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	25	A
Forward Voltage @ $I_F = 1.0\text{A}$	V <sub>F</sub>	0.45	V
@ $I_F = 3.0\text{A}$		0.75	
Peak Reverse Current @ $T_A = 25^\circ\text{C}$	I <sub>R</sub>	1	mA
At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$		10	
Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	500	°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-65 to 150	°C

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

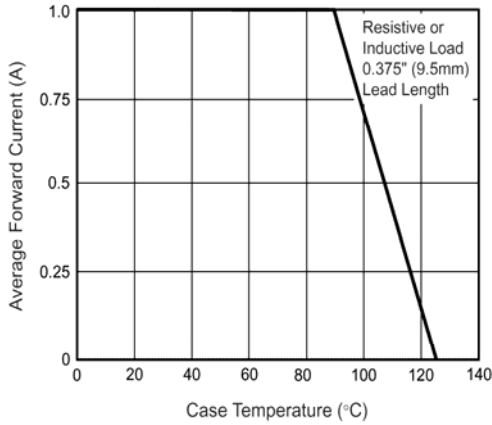
## ■ Marking

Marking	SJ
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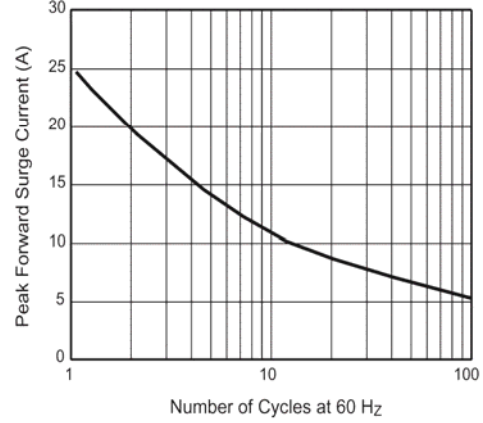
**KB160M-20**

**Typical Characteristics**

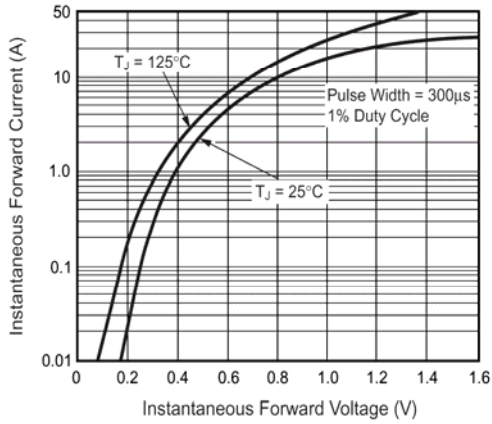
**Fig. 1 - Forward Current Derating Curve**



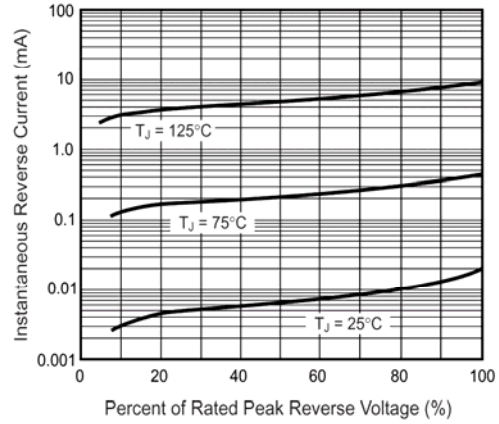
**Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current**



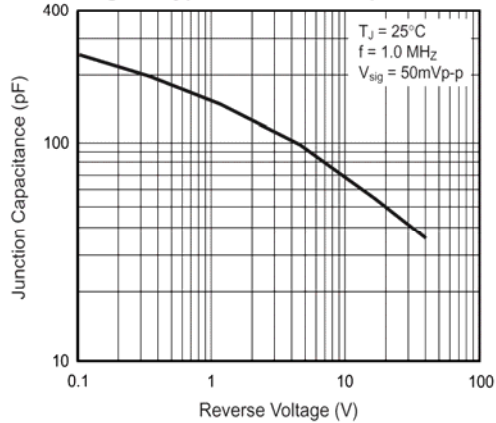
**Fig. 3 - Typical Instantaneous Forward Characteristics**



**Fig. 4 - Typical Reverse Characteristics**



**Fig. 5 - Typical Junction Capacitance**



**Fig. 6 - Typical Transient Thermal Impedance**

