

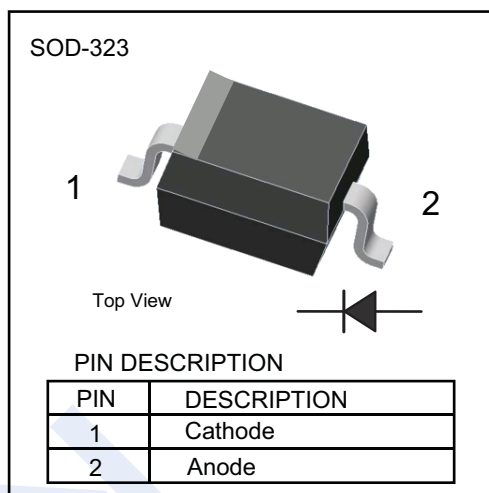
Schottky Diodes

MBR0520W ~ MBR0540W

(KBR0520W ~ KBR0540W)

■ Features

- Low power loss, high efficiency
- High current capability
- Low forward voltage drop
- High Surge Capability



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

Parameter	Symbol	MBR0520W	MBR0530W	MBR0540W	Unit
Peak Repetitive Reverse Voltage	VRRM	20	30	40	V
RMS Voltage	VRMS	14	21	28	
DC Blocking Voltage	VDC	20	30	40	
Forward Voltage @ $I_F=1\text{A}$	V _F	0.45	0.55	0.6	
Forward Voltage @ $I_F=3.1\text{A}$		0.75	0.875	0.9	
Average Forward Rectified Current @ $T_L=90^\circ\text{C}$	I _{FAV}	1			A
Non-Repetitive Peak Forward Surge Current @8.3ms	I _{FSM}	25			
Reverse Voltage Leakage Current	I _R	$T_a = 25^\circ\text{C}$	1		mA
		$T_a = 100^\circ\text{C}$	10		
Typical Junction Capacitance	C _J	110			pF
Junction Temperature	T _J	125			°C
Storage Temperature range	T _{stg}	-55 to 125			

■ Marking

NO.	MBR0520W	MBR0530W	MBR0540W
Marking	SJ	SK	SL

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■ Typical Characteristics

Fig.1 Forward Current Derating Curve

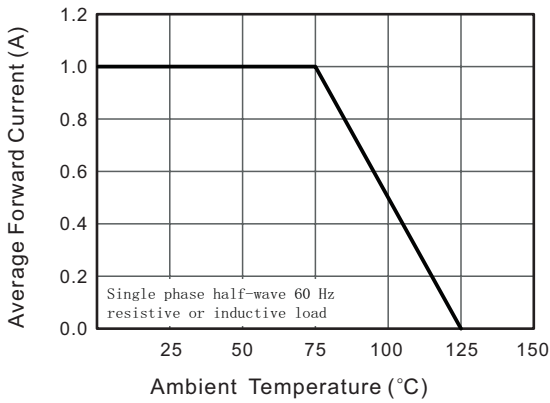


Fig.2 Typical Reverse Characteristics

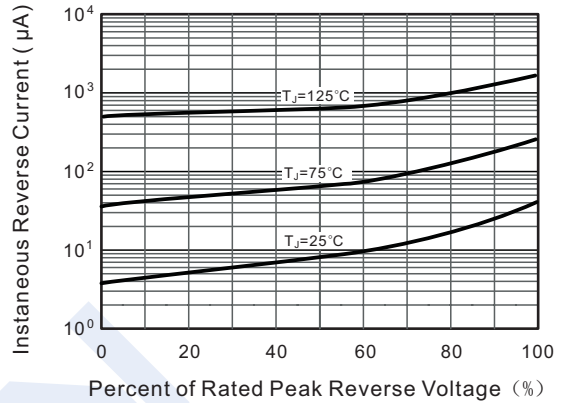


Fig.3 Typical Forward Characteristic

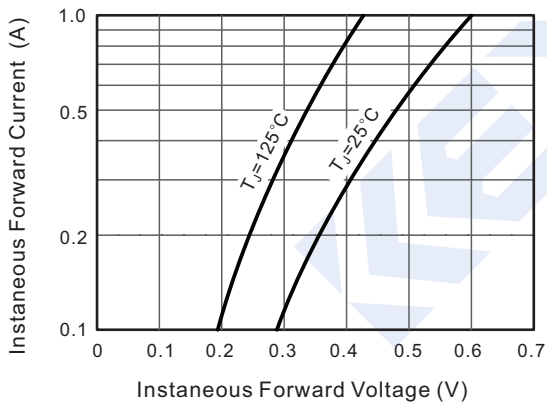


Fig.4 Typical Junction Capacitance

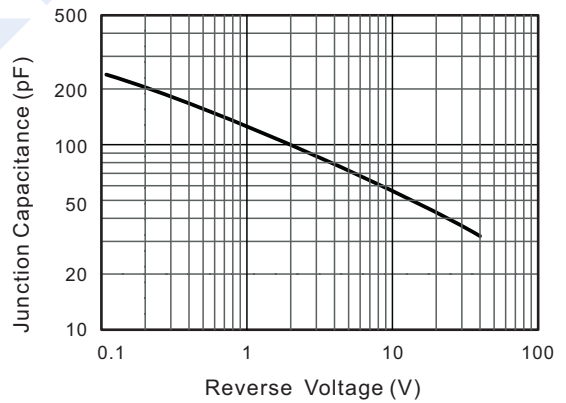


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

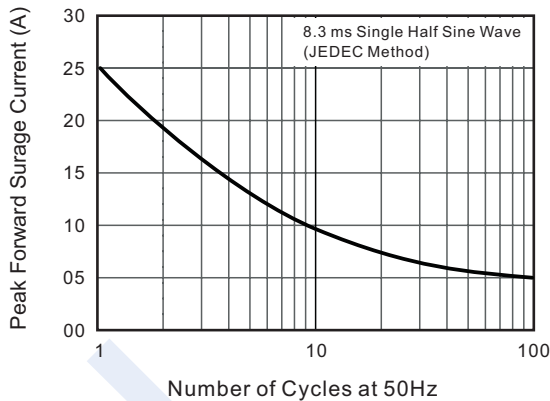
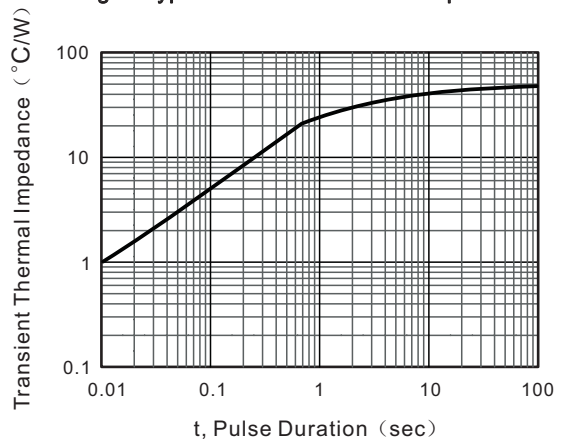


Fig.6- Typical Transient Thermal Impedance



Schottky Diodes

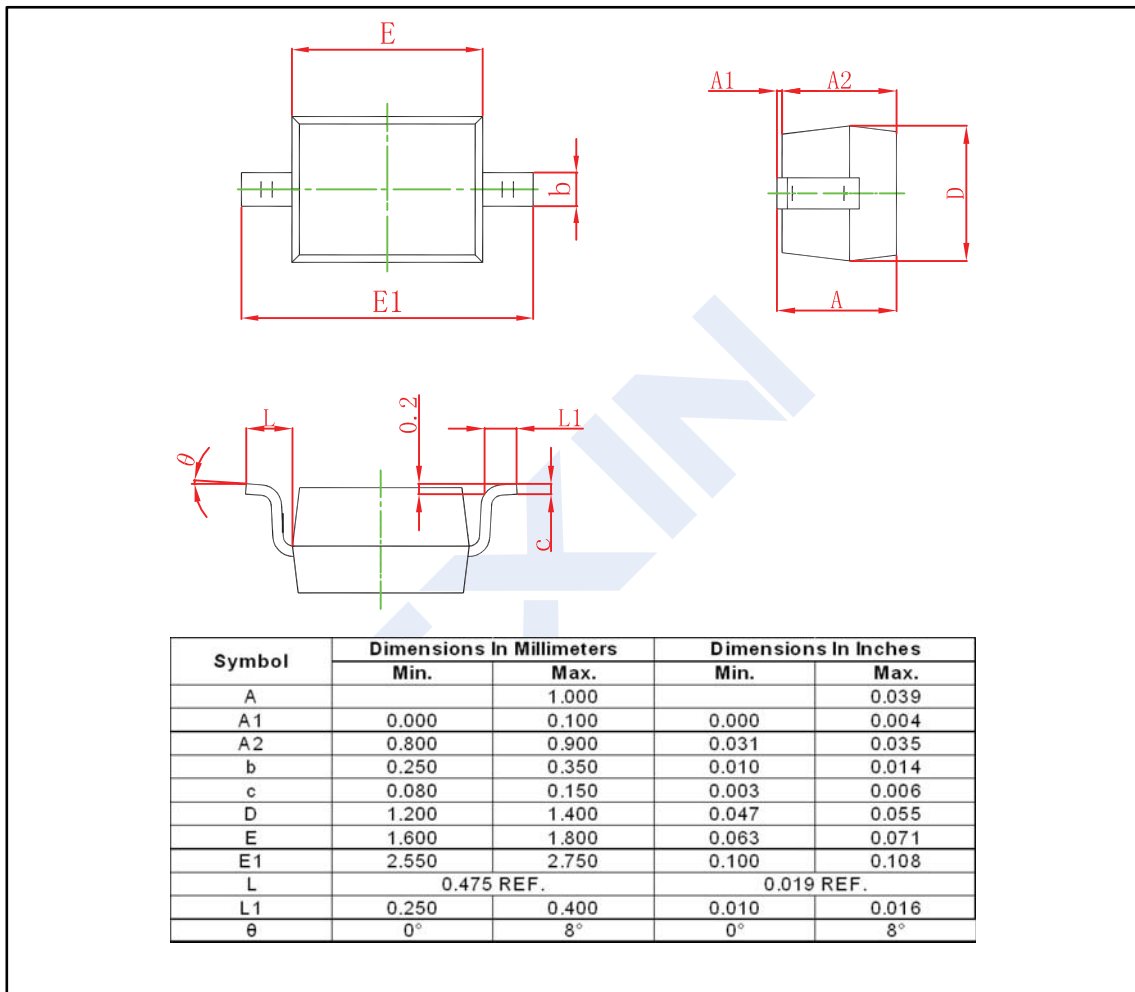
MBR0520W ~ MBR0540W

(KBR0520W ~ KBR0540W)

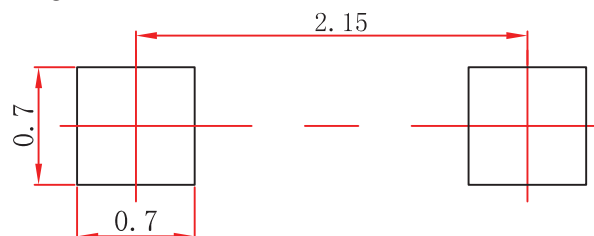
■ Package Outline Dimensions

Plastic surface mounted package; 2 leads

SOD-323



■ The Recommended Mounting Pad Size



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.