

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE: 40 V
CURRENT: 0.5 A

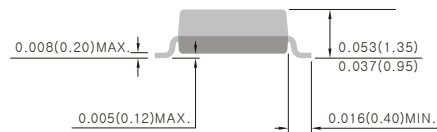
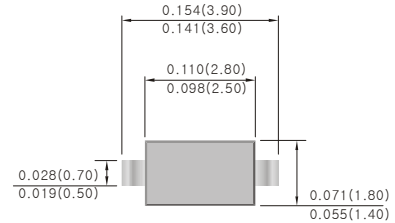
FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- High Conductance
- Also Available in Lead Free Version

MECHANICAL DATA

- Case: SOD-123
- Terminals: Solderable per MIL-STD-750
 , Method 2026
- Approx. Weight: 16mg 0.00056oz

SOD-123



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	B0520LW	B0530W	B0540W	Units
Peak Repetitive Reverse Voltage	V_{RRM}	20	30	40	V
RMS reverse voltage reverse voltage (DC)	V_{RMS}	14	21	28	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	V
Maximum Average Forward Current at Ta=25°C	I_o	0.5			A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	5.5			A
Maximum Instantaneous Forward Voltage	IF=0.1A	0.330	0.375	—	V
	IF=0.5A	0.390	0.430	0.510	
	IF=1A	—	—	0.620	
Reverse current	VR=10V	75	—	—	uA
	VR=15V	—	20	—	
	VR=20V	250	—	10	
	VR=30V	—	130	—	
	VR=40V	—	—	20	
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	200			°C/W
Junction temperature	T_j	-55 ~ +125			V
Storage temperature	T_{stg}	-55 ~ +150			V

Fig.1 Forward Current Derating Curve

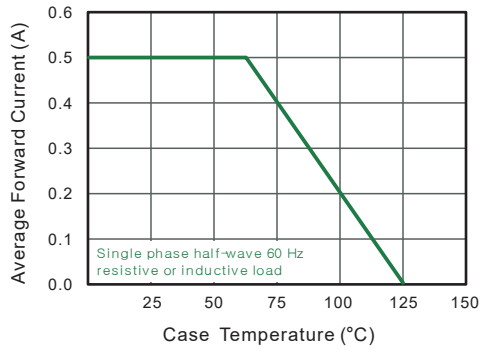


Fig.2 Typical Reverse Characteristics

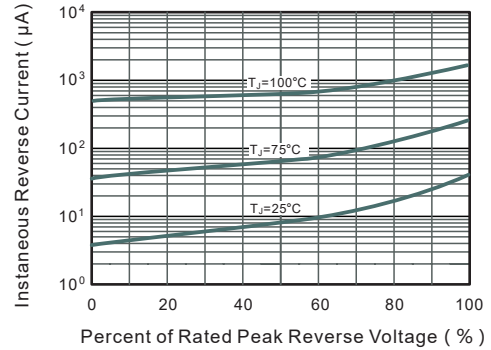


Fig.3 TYPICAL FORWARD VOLTAGE

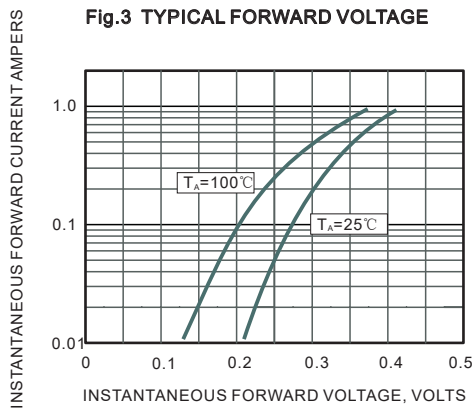


Fig.4 Typical Junction Capacitance

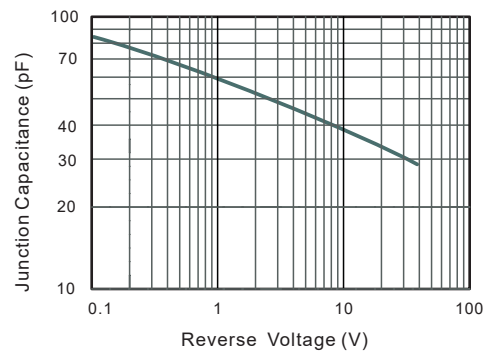


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

