



SCHOTTKY BARRIER RECTIFIERS

FEATURES

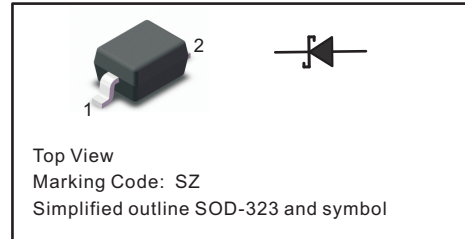
- Low Forward Voltage Drop
- Very Small SMD Package
- Low Voltage Rectification
- High Efficiency DC/DC Conversion
- Switch Mode Power Supply
- Inverse Polarity Protection
- Low Power Consumption Applications

MECHANICAL DATA

- Case: SOD-323
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 5.48mg / 0.00019oz

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	B1040WS	Units
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
DC Reverse Voltage	V_R	40	V
Maximum Average Forward Current at Ta=25°C	I_O	1.0	A
Power dissipation	P_d	250	mW
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	20	A
Maximum Instantaneous Forward Voltage	V_F	0.51 @ $I_F=0.5A$ 0.55 @ $I_F=0.7A$	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	50@ $V_R=20V$	uA
Typical Junction Capacitance at $V_R=10V$, $f=1MHz$	C_j	20	pF
Storage and Operating Junction Temperature Range	T_j, T_{stg}	-55 ~ +125	°C



Fig.1 Power Derating Curve

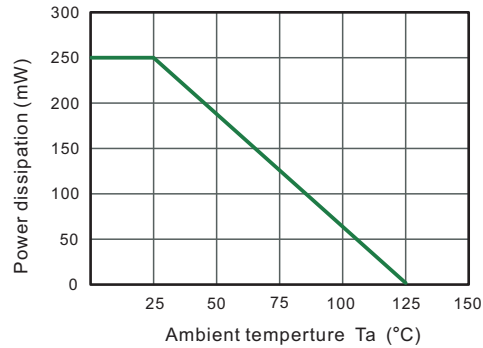


Fig.2 Typical Reverse Characteristics

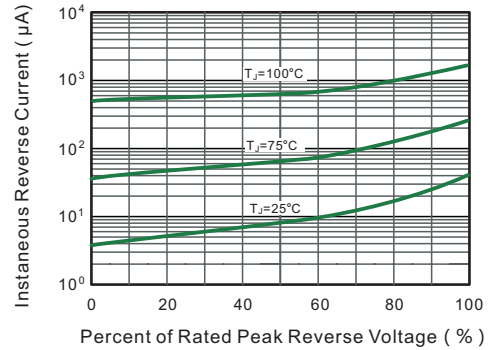


Fig.3 Typical Forward Characteristic

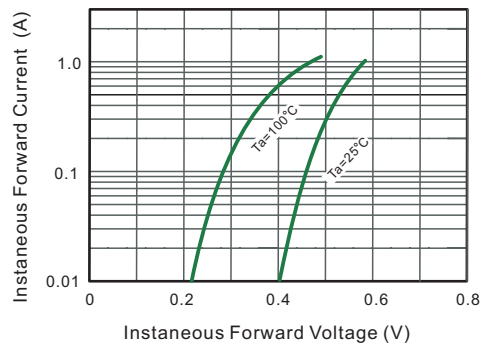


Fig.4 Typical Junction Capacitance

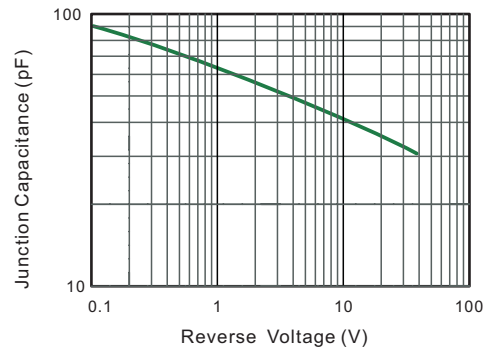
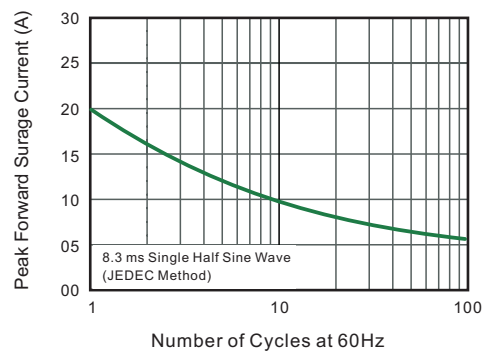


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

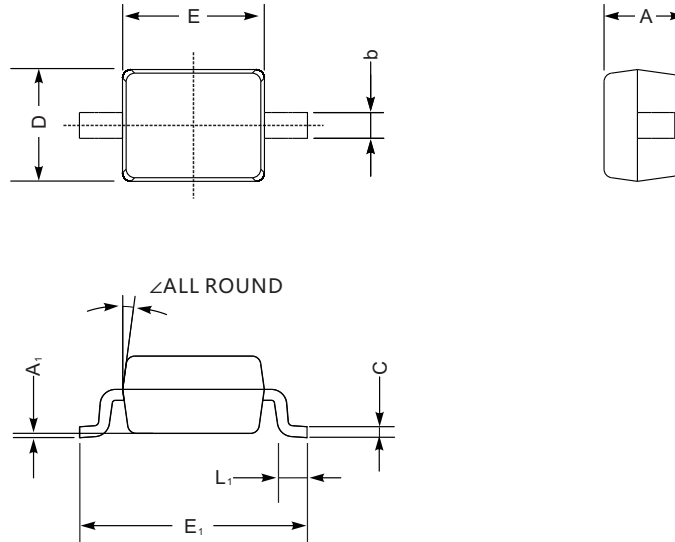




PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

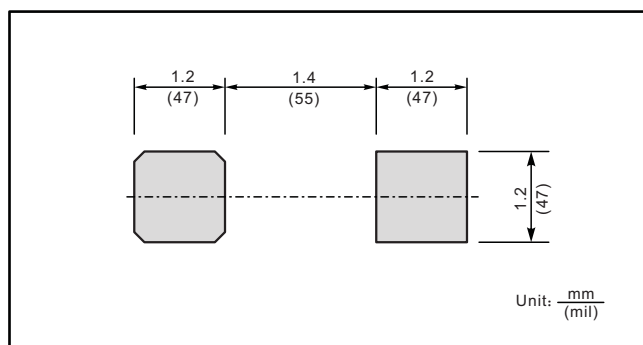
SOD-323



SOD-323 mechanical data

UNIT		A	C	D	E	E ₁	b	L ₁	A ₁	$\angle$
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	63	100	9.8	7.9	—	

The recommended mounting pad size



Marking

Type number	Marking code
B1040WS	SZ