



SCHOTTKY BARRIER DIODES

FEATURES

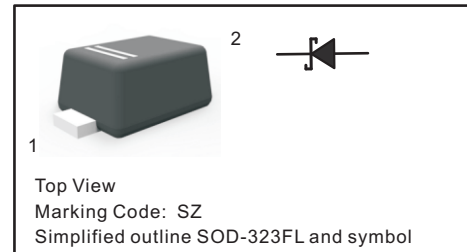
- Guard ring protection
- Low forward voltage drop
- For use in low voltage, high frequency inverters
- High surge current capability

MECHANICAL DATA

- Case: SOD-323FL
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 4.5mg / 0.00016oz

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	B1040WSFL	Units
Maximum recurrent peak reverse voltage	V_{RRM}	40	V
Maximum RMS voltage	V_{RMS}	28	V
Maximum DC blocking voltage	V_{DC}	40	V
Continuous forward current	I_F	1	A
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	50 @ $V_R=20V$	μA
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	20	A
Maximum Instantaneous Forward Voltage @ $I_F=0.5A$ @ $I_F=0.7A$	V_F	0.51 0.55	V
Total capacitance $V_R=4V, f=1MHz$	C_{tot}	40	pF
Total power dissipation	P_{tot}	250	mW
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	400	$^{\circ}C/W$
Junction Temperature	T_j	125	$^{\circ}C$
Storage Temperature	T_{stg}	-55 ~ +150	$^{\circ}C$



Fig.1 Power Derating Curve

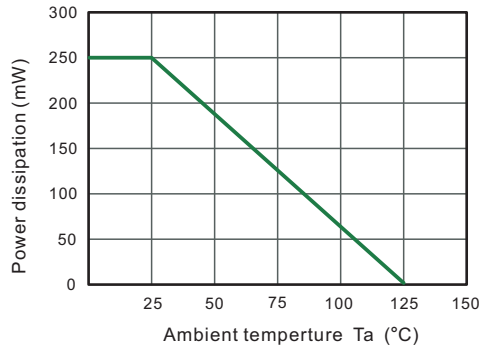


Fig.2 Typical Reverse Characteristics

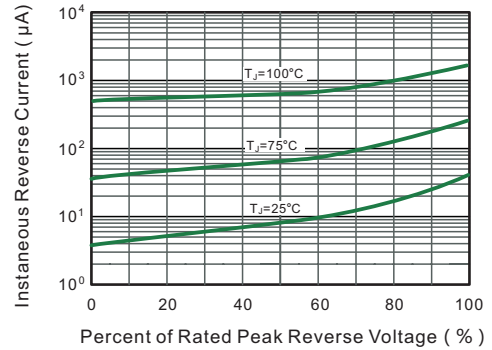


Fig.3 Typical Forward Characteristic

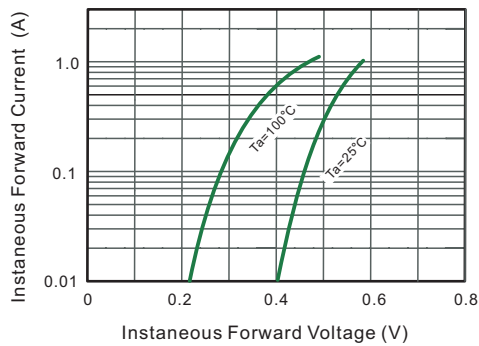


Fig.4 Typical Junction Capacitance

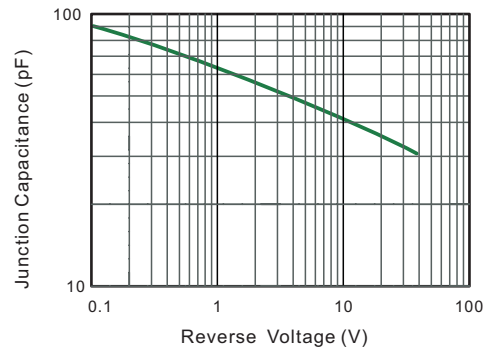
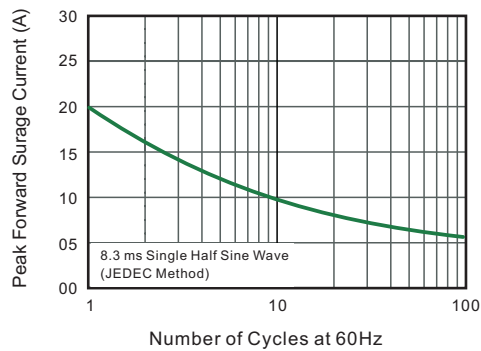


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

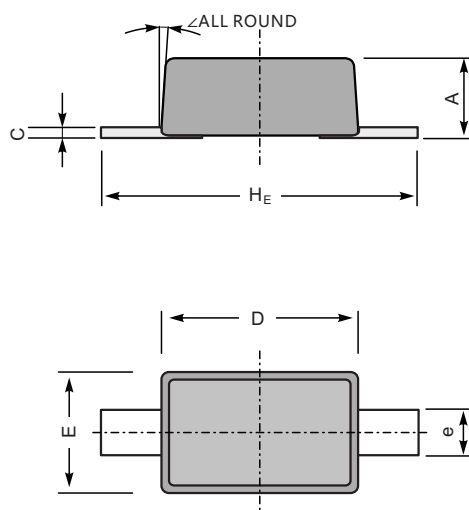




PACKAGE OUTLINE

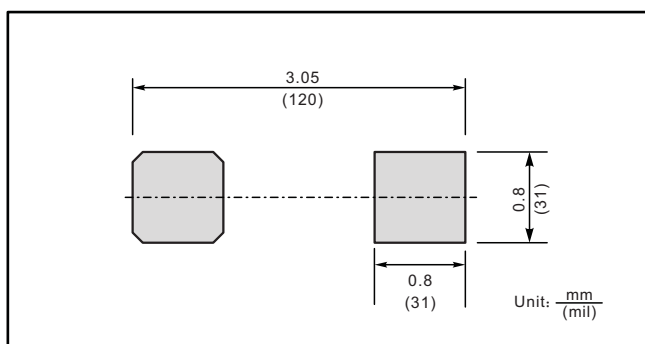
Plastic surface mounted package; 2 leads

SOD-323FL



UNIT		A	C	D	E	e	H _E	∠
mm	max	1.0	0.25	1.8	1.35	0.4	2.7	8°
	min	0.8	0.05	1.6	1.15	0.25	2.3	
mil	max	39	9.8	71	53	18	106	
	min	31	2.0	63	45	10	91	

The recommended mounting pad size



Marking

Type number	Marking code
B1040WSFL	SZ