



SCHOTTKY BARRIER RECTIFIERS

FEATURES

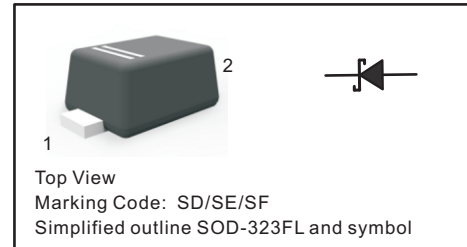
- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- High Conductance
- Also Available in Lead Free Version

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	B0520WFL	B0530WFL	B0540WFL	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}	22			A
Maximum Instantaneous Forward Voltage $I_F=0.1A$ $I_F=0.5A$ $I_F=1A$	V_F	0.33 0.39 —	0.36 0.45 —	— 0.51 0.62	V
Reverse current $V_R=10V$ $V_R=15V$ $V_R=20V$ $V_R=30V$ $V_R=40V$	I_R	75 — 250 — —	— 75 100 500 —	— — 10 — 20	uA
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	500			°C/W
Junction temperature	T_j	-55 ~ +125			°C
Storage temperature	T_{stg}	-55 ~ +150			°C



Fig.1 Forward Current Derating Curve

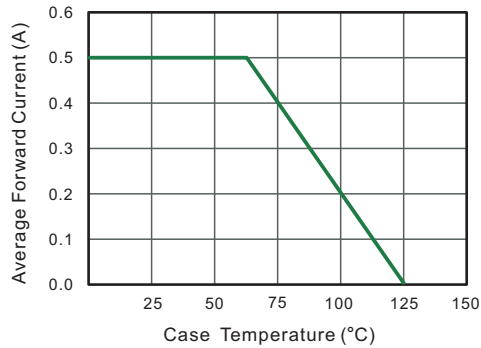


Fig.2 Typical Reverse Characteristics

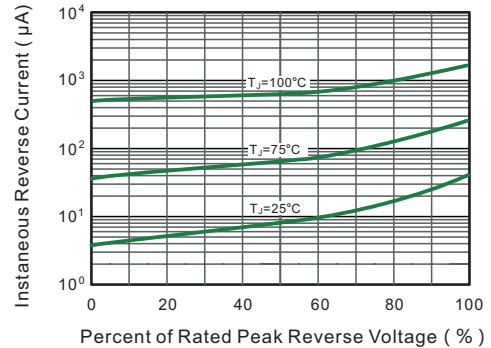


Fig.3 TYPICAL FORWARD VOLTAGE

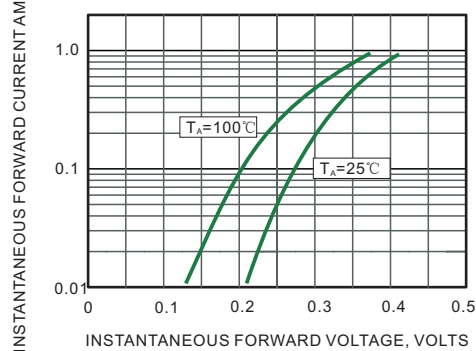


Fig.4 Typical Junction Capacitance

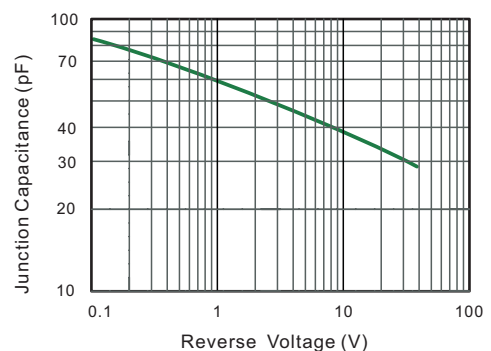


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

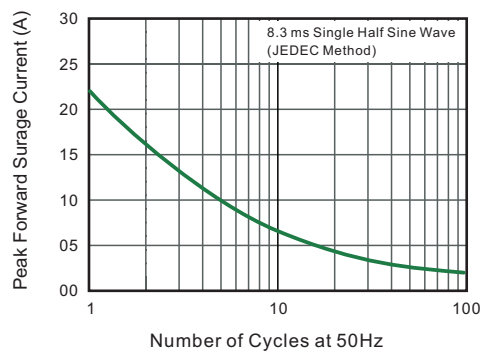
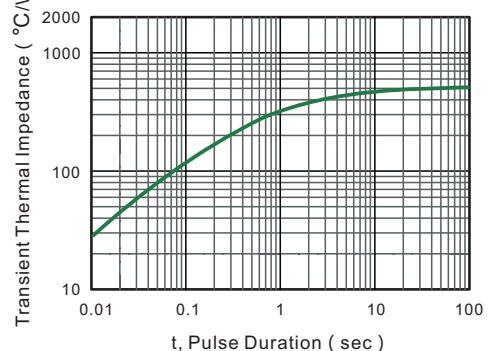


Fig.6 Typical Transient Thermal Impedance

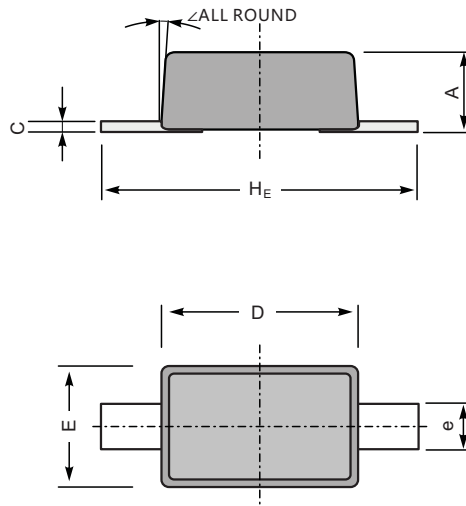




PACKAGE OUTLINE

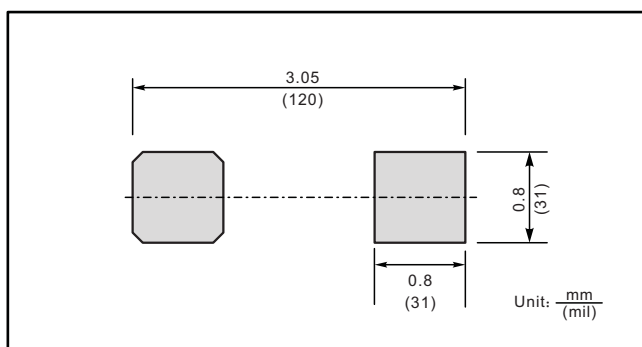
Plastic surface mounted package; 2 leads

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
B0520WFL	SD
B0530WFL	SE
B0540WFL	SF