



## SCHOTTKY BARRIER DIODES

### FEATURES

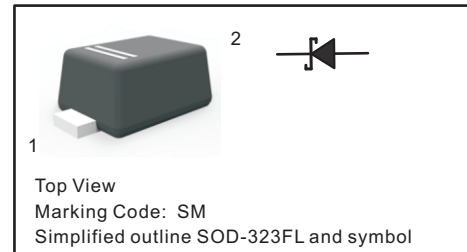
- Guard ring protection
- Low forward voltage drop
- For use in low voltage, high frequency inverters
- High surge current capability

### 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	B16WSFL	Units
Maximum recurrent peak reverse voltage	$V_{RRM}$	60	V
Maximum RMS voltage	$V_{RMS}$	42	V
Maximum DC blocking voltage	$V_{DC}$	60	V
Continuous forward current	$I_F$	1	A
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	0.1 @ $V_R=60V$	mA
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	25	A
Maximum Instantaneous Forward Voltage	$V_F$	0.7 @ $I_F=1.0A$	V
Total capacitance $V_R=4V, f=1MHz$	$C_{tot}$	120	pF
Total power dissipation	$P_{tot}$	250	mW
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	400	°C/W
Junction Temperature	$T_j$	125	°C
Storage Temperature	$T_{stg}$	-55 ~ +150	°C



Fig.1 Power Derating Curve

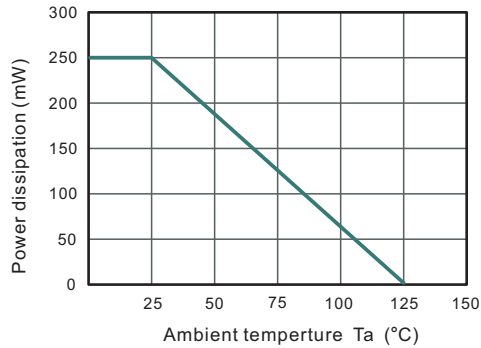


Fig.2 Typical Reverse Characteristics

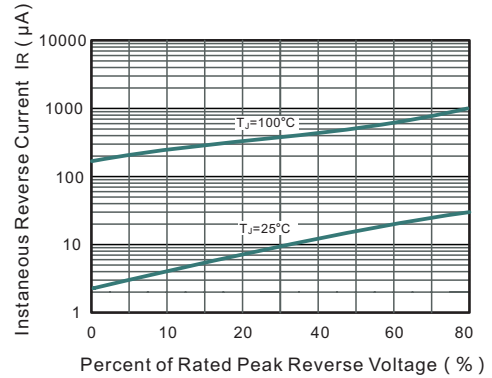


Fig.3 TYPICAL FORWARD VOLTAGE

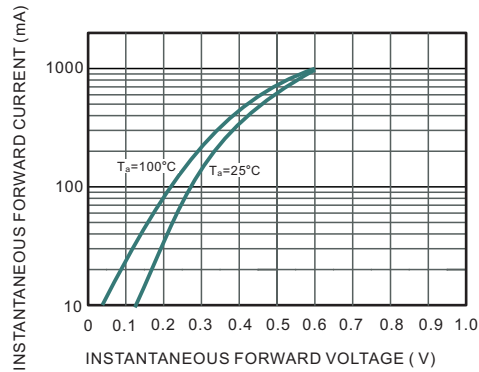


Fig.4 Typical Junction Capacitance

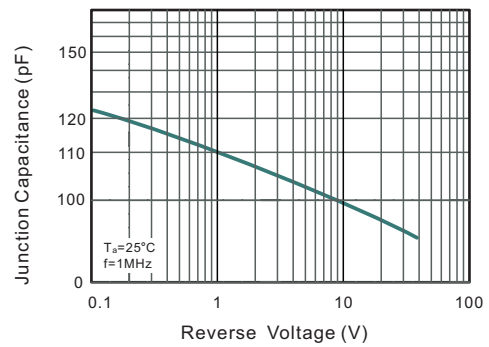


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

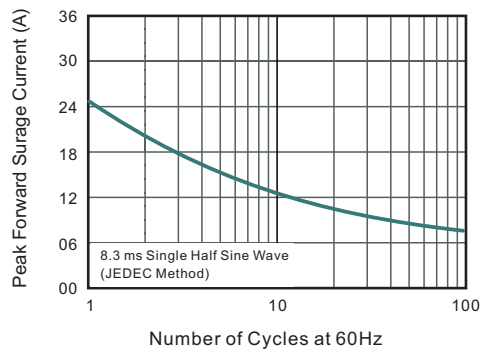
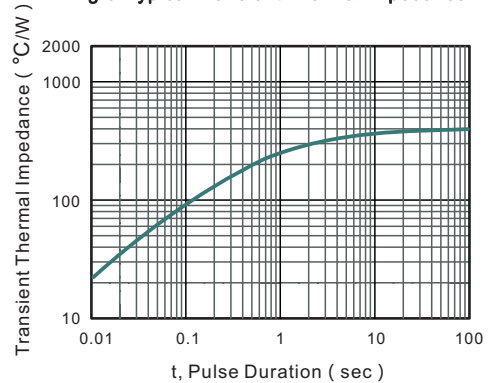


Fig.6 Typical Transient Thermal Impedance

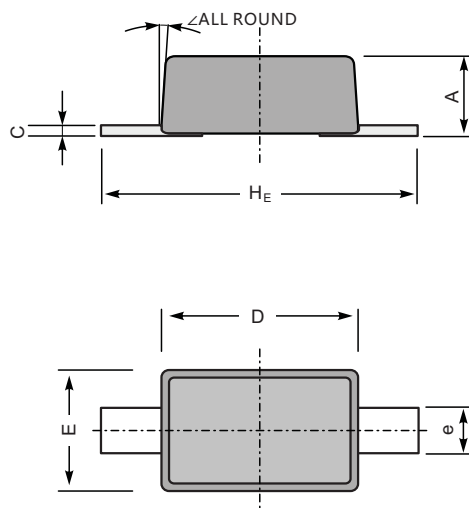




### PACKAGE OUTLINE

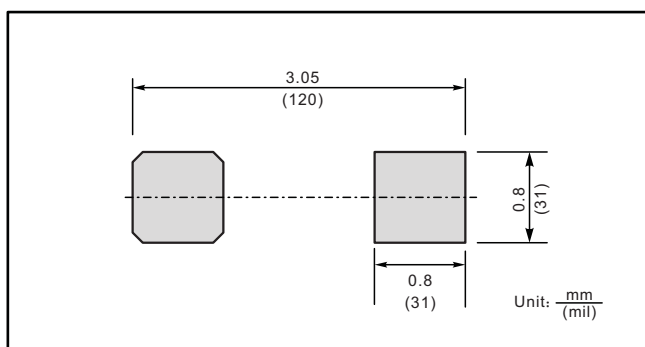
Plastic surface mounted package; 2 leads

SOD-323FL



UNIT		A	C	D	E	e	H <sub>E</sub>	∠
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
B16WSFL	SM