SCHOTTKY BARRIER DIODES

Reverse Voltage - 40 V

Forward Current - 1 A

Pb lead-free ROHS

Pinning

1.Cathode	2.Anode



SOD-323FL

FEATURES

- Guard ring protection
- Low forward voltage drop
- For use in low voltage, high frequency inverters
- High surge current capability
- Lead free in comply with EU RoHS 2011/65/EU directives

Marking Code	
B1040WSFL	SZ

MECHANICAL DATA

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

Maximum Ratings and Electrical characteristics
Ratings at 25 ° ambient temperature unless otherwise specified.

Parameter	Symbols	B1040WSFL	Units
Maximum Repetitive 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	$I_{F(AV)}$	1	A
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	50 @VR=20V	uA
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load (JEDEC method)	I_{FSM}	20	A
Maximum Instantaneous Forward Voltage @ IF=0.5A @ IF=0.7A	V_F	0.51 0.55	V
Total capacitiance VR=4V,f=1MHz	C_{tot}	40	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

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Fig.1 Power Derating Curve

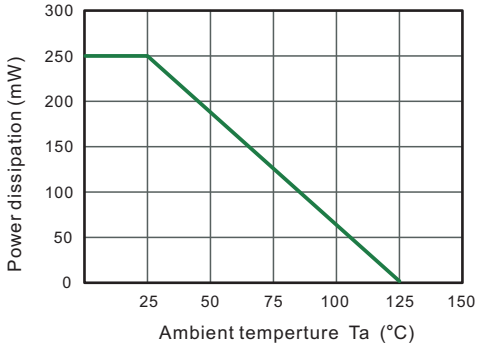


Fig.2 Typical Reverse Characteristics

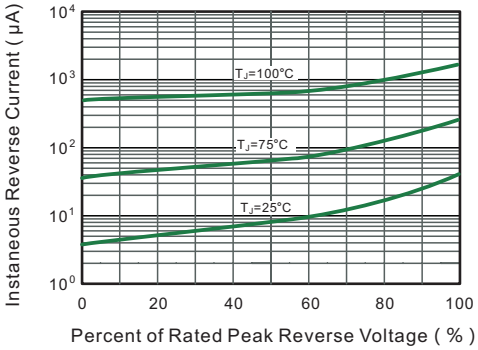


Fig.3 Typical Forward Characteristic

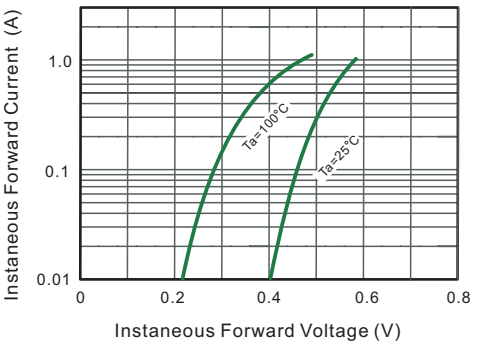


Fig.4 Typical Junction Capacitance

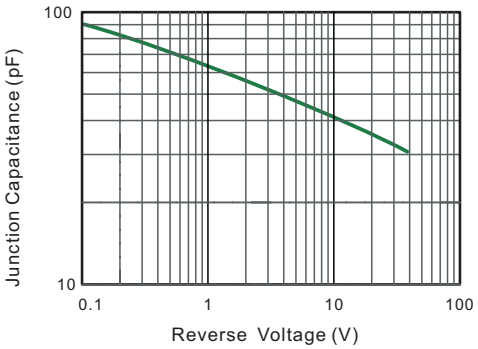
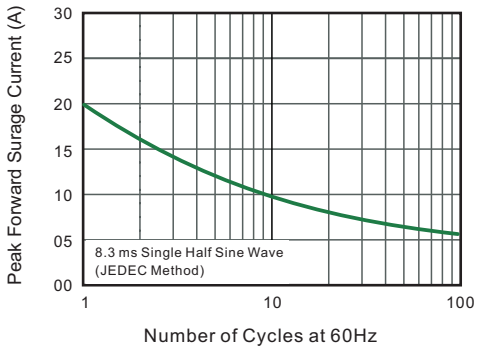


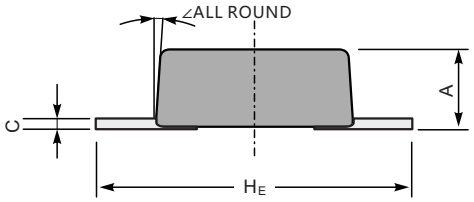
Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

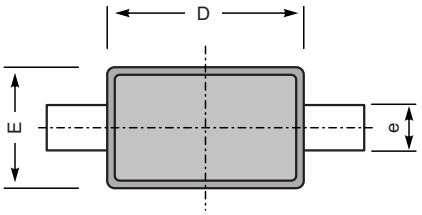


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Package Outline SOD-323FL

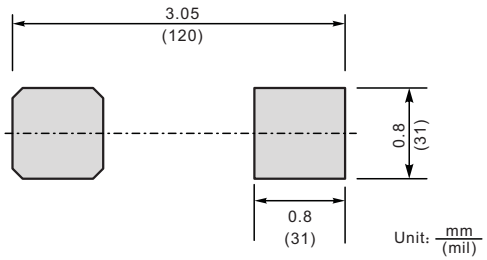
Plastic surface mounted package; 2 leads





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



Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
SOD-323FL	Tape/Reel,7"reel	3000	EIA-481-1

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