

SCHOTTKY BARRIER DIODES

Reverse Voltage - 40 V

Forward Current - 1 A

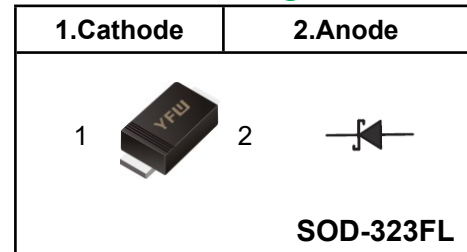
FEATURES

- ◆ 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

MECHANICAL DATA

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

Pinning



Marking Code

B1040WSFL	SZ
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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 capacitance 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

Fig.1 Power Derating Curve

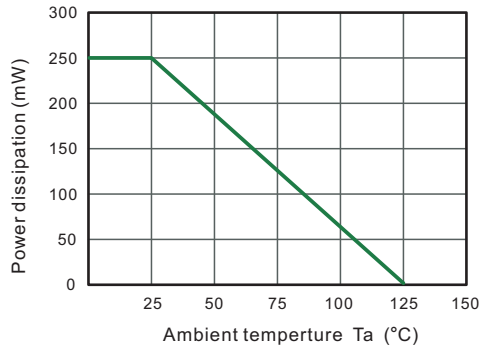


Fig.2 Typical Reverse Characteristics

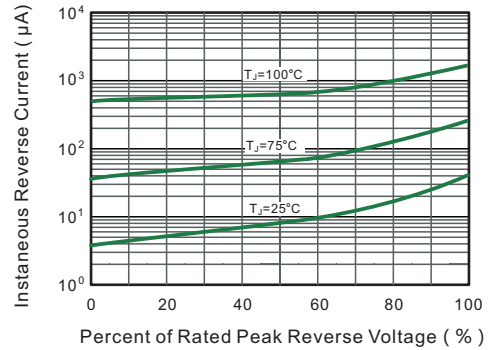


Fig.3 Typical Forward Characteristic

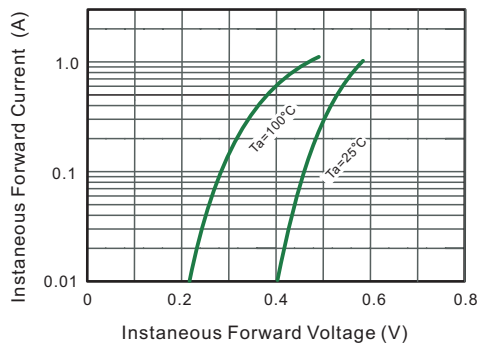


Fig.4 Typical Junction Capacitance

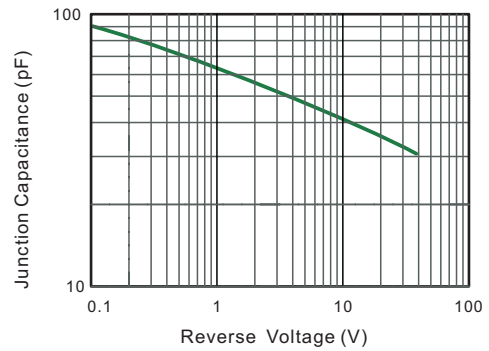
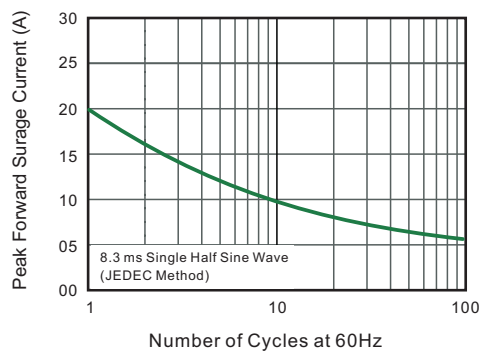


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Ordering information

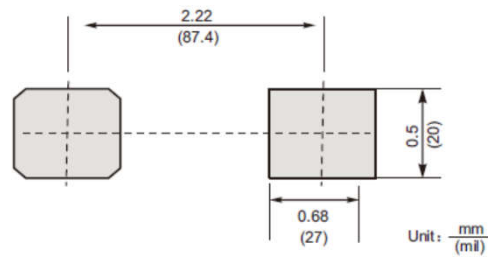
Package	Packing Description	Packing Quantity
SOD-323FL	Tape/Reel,7"reel	3000PCS/Reel 120000PCS/Carton

Package Dimensions

SOD-323FL

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.70	0.90	28	36
B	0.20	0.40	8	16
C	0.027	0.227	1	9
D	1.15	1.35	45	53
L	0.38	0.58	15	23
E	1.70	1.90	67	75
HE	2.30	2.70	91	67
∠	9°			

The recommended mounting pad size



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