

**SCHOTTKY BARRIER DIODE**

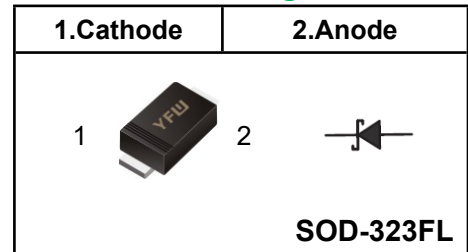
**FEATURES**

- ◆ Low Forward Voltage Drop
- ◆ Guard Ring Construction for Transient Protection
- ◆ Negligible Reverse Recovery Time
- ◆ Low Capacitance
- ◆ 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**

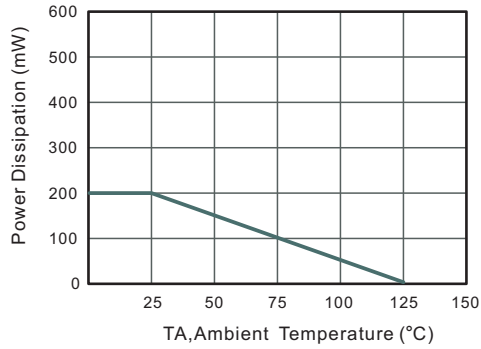
<b>SD103AWSFL</b>	<b>S4</b>
<b>SD103BWSFL</b>	<b>S5</b>
<b>SD103CWSFL</b>	<b>S6</b>

**Maximum Ratings and Electrical characteristics**

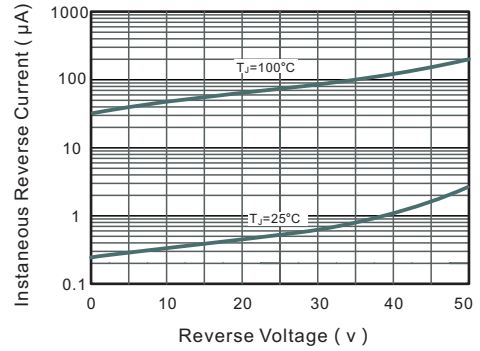
Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter		Symbols	SD103AWSFL	SD103BWSFL	SD103CWSFL	Units
Peak Repetitive Reverse Voltage		$V_{RRM}$	40	30	20	V
RMS reverse voltage		$V_{RMS}$	28	21	14	V
Working Peak Reverse Voltage		$V_{DC}$	40	30	20	V
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load(JEDEC method)		$I_{FSM}$	13			A
Maximum Instantaneous Forward Voltage	$I_F=20mA$	$V_F$	0.37			V
	$I_F=200mA$		0.60			
Power Dissipation		$P_D$	200			mW
Reverse current	SD103AWSFL, $V_R=30V$	$I_R$	5	-	-	uA
	SD103BWSFL, $V_R=20V$		-	5	-	
	SD103CWSFL, $V_R=10V$		-	-	5	
Thermal Resistance, Junction to Ambient Air		$R_{\theta JA}$	300			°C/W
Reverse voltage $I_R=100uA$	SD103AWSFL	$V_{(BR)R}$	40			V
	SD103BWSFL		30			
	SD103CWSFL		20			
Reverse recovery time $I_F=I_R=200mA, I_{rr}=0.1xI_R, RL=100\Omega$		$T_{rr}$	10			nS
Forward Continuons Current		$I_{FM}$	350			mA
Total capacitance $V_R=0V, f=1MHZ$		$C_{tot}$	50			pF
Junction temperature		$T_j$	125			°C
Storage temperature		$T_{stg}$	-55 ~ +150			°C

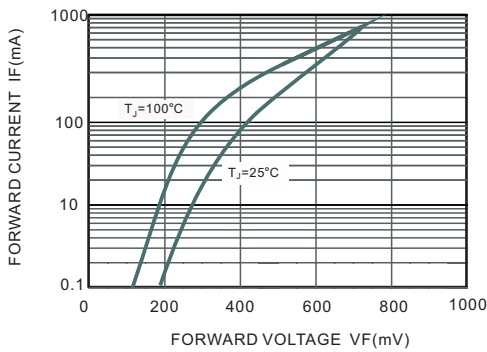
**Fig.1 Power Derating Curve**



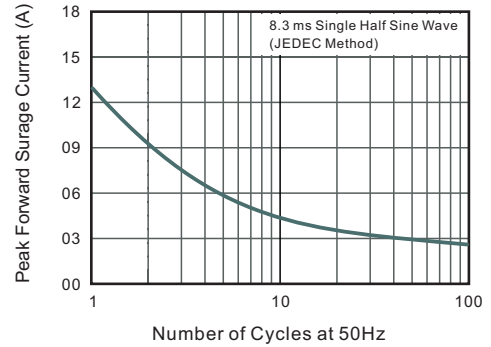
**Fig.2 Typical Reverse Characteristics**



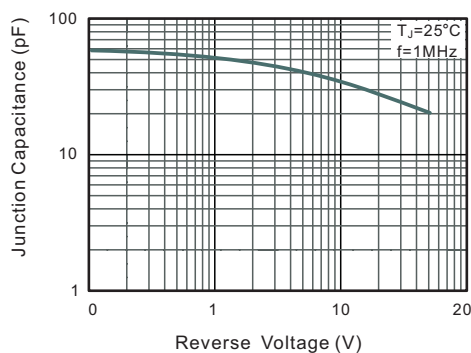
**Fig.3 Forward Characteristics**



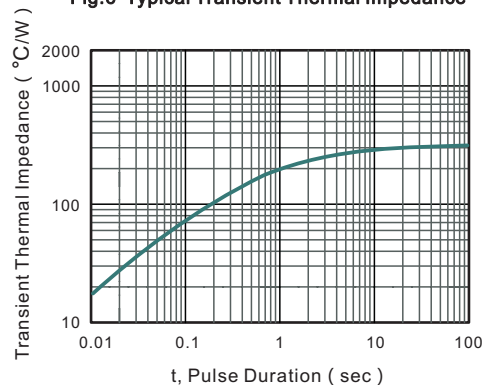
**Fig.4 Maximum Non-Repetitive Peak Forward Surge Current**



**Fig.5 Typical Junction Capacitance**



**Fig.6 Typical Transient Thermal Impedance**



Ordering information

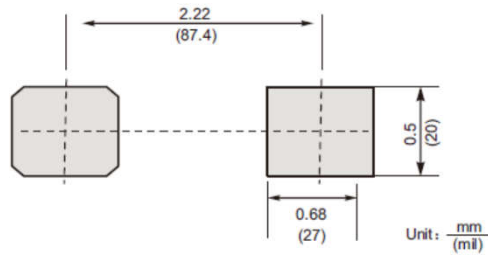
Package	Packing Description	Packing Quantity
SOD-323FL	Tape/Reel,7"reel	3000PCS/Reel 120000PCS/Carton

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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