

SCHOTTKY BARRIER RECTIFIERS

Reverse Voltage - 20 to 40 V

Forward Current – 0.5 A

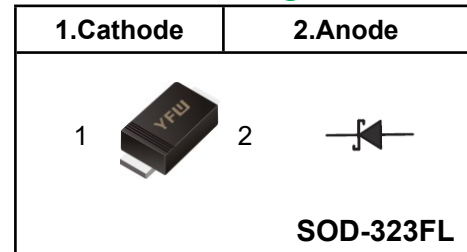
FEATURES

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

B0520WFL	SD
B0530WFL	SE
B0540WFL	SF

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	IF=0.1A	0.33	0.36	-	V
	IF=0.5A	0.39	0.45	0.51	
	IF=1A	-	-	0.62	
Reverse current	VR=10V	75	-	-	mA
	VR=15V	-	75	-	
	VR=20V	250	100	10	
	VR=30V	-	500	-	
	VR=40V	-	-	20	
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	500			°C/W
Junction temperature	T_j	-55 ~ +150			°C
Storage temperature	T_{stg}	-55 ~ +150			°C

Fig.1 Forward Current Derating Curve

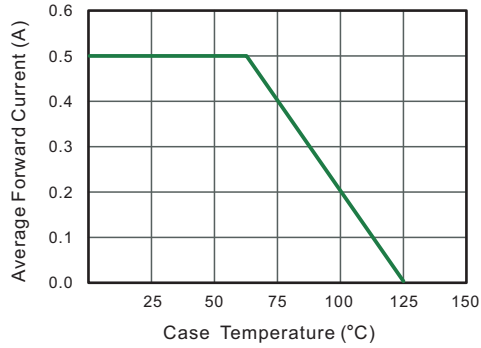


Fig.2 Typical Reverse Characteristics

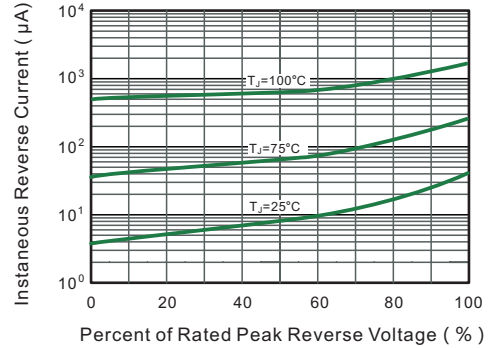


Fig.3 TYPICAL FORWARD VOLTAGE

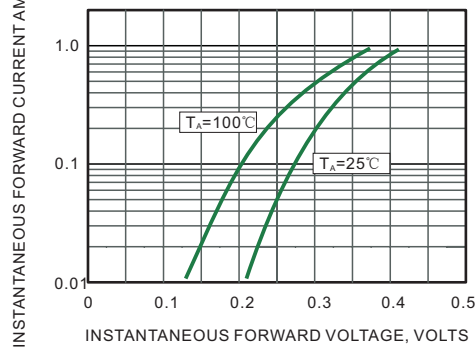


Fig.4 Typical Junction Capacitance

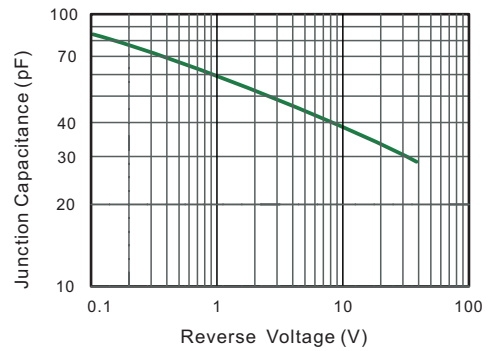


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

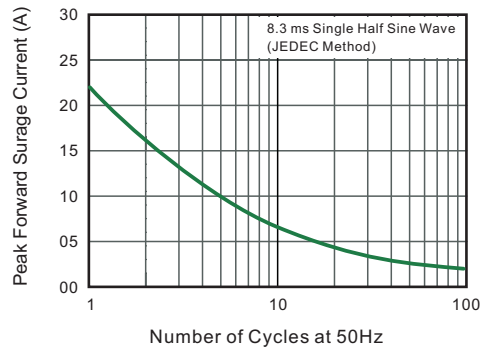
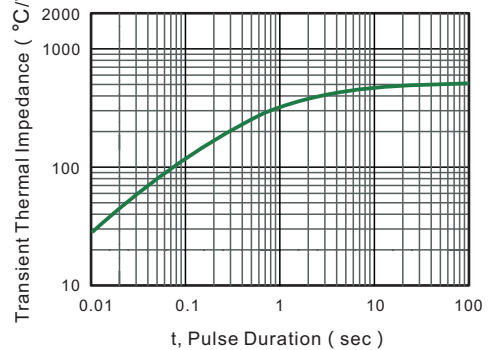


Fig.6 Typical Transient Thermal Impedance



Ordering information

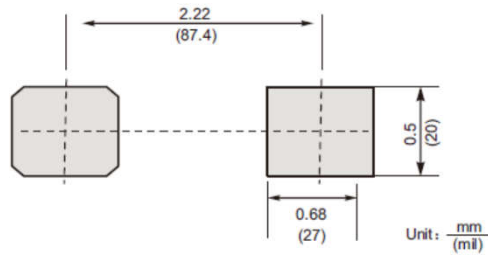
Package	Packing Description	Packing Quantity
SOD-323FL	Tape/Reel,7"reel	3000PCS/Reel 120000PCS/Carton

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



Disclaimer

The information presented in this document is for reference only. GuangDong Youfeng Microelectronics Co.,Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise. The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices),YFW or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale. This publication supersedes & replaces all information previously supplied. For additional information, please visit our website <https://www.yfwdiode.com>, or consult YFW sales office for further assistance.