

SCHOTTKY BARRIER DIODES

Reverse Voltage - 45 V

Forward Current – 0.1 A

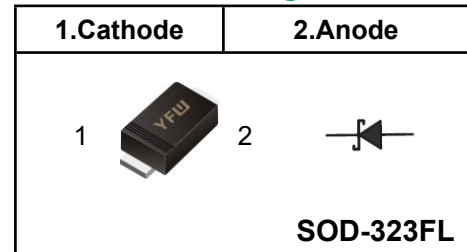
FEATURES

- ◆ Guard ring protection
- ◆ Low forward voltage drop
- ◆ For use in low voltage, high frequency inverters
- ◆ Surface mount device type
- ◆ 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

RB501VFL-40	4
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Maximum Ratings And Electrical Characteristics

Ratings at 25 ° ambient temperature unless otherwise specified.

Parameter	Symbols	RB501VFL-40	Units
Maximum Repetitive Peak Reverse Voltage	V_{RM}	45	V
DC reverse voltage	V_R	40	V
Continuous forward current	I_o	0.1	A
Reverse Leakage Current	I_R	30 @ $V_R=10V$	uA
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load (JEDEC method)	I_{FSM}	13	A
Maximum Forward Voltage	V_F	0.34 @ $I_F=10mA$ 0.55 @ $I_F=100mA$	V
Capacitance between terminals $V_R=10V, f=1MHz$	C_T	6	pF
Junction Temperature	T_j	125	°C
Storage Temperature	T_{stg}	-55 ~ +150	°C

Fig.1 Derating curve

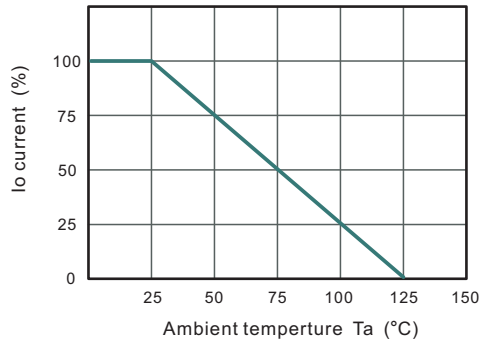


Fig.2 Typical Reverse Characteristics

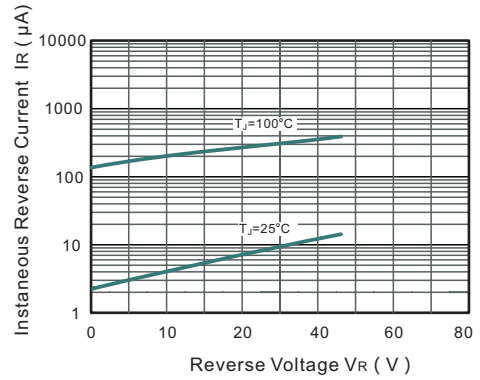


Fig.3 TYPICAL FORWARD VOLTAGE

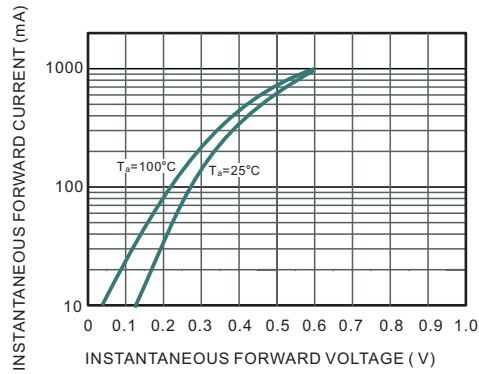


Fig.4 Typical Junction Capacitance

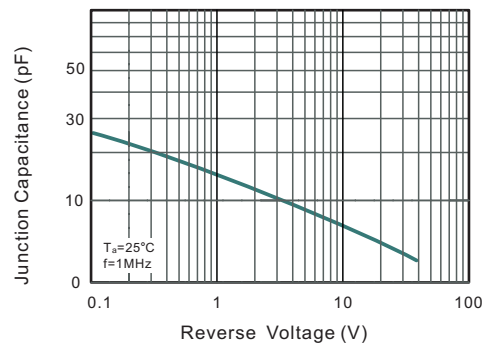
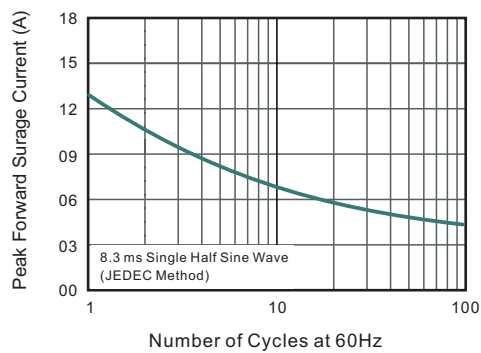


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Ordering information

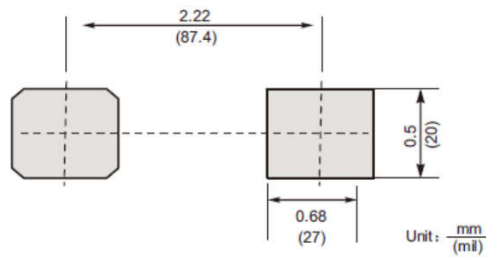
Package	Packing Description	Packing Quantity
SOD-323FL	Tape/Reel,7"reel	3000PCS/Reel 120000PCS/Carton

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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