

SCHOTTKY BARRIER RECTIFIERS

Reverse Voltage - 40V

Forward Current - 2 A

FEATURES

- ◆ High current rectifier Schottky diodes
- ◆ Low voltage, low inductance
- ◆ For detection and step-up-conversion

MECHANICAL DATA

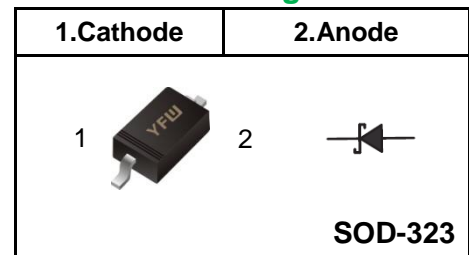
- ◆ Case: SOD-323
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026
- ◆ Approx. Weight: 5.48mg / 0.00019oz

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	DS24WS	Units
Non-repetitive Peak Reverse Voltage	V_{RRM}	40	V
Forward Current	I_F	2	A
Forward Surge Current at 8.3ms	I_{FSM}	30	A
Maximum Forward Voltage at $I_F = 2A$	V_F	0.53	V
Peak Reverse Current $V_R=40V$	I_R	0.15	mA
Breakdown voltage $I_R=500\mu A$	V_{BR}	40	V
Diodes Capacitance $V_R=10V, f=1MHz$	C_T	43	pF
Reverse Recovery Time $I_F = I_R = 100mA,$ $I_{rr} = 10mA$	t_{rr}	12	ns
Operating Junction Temperature Range	T_j	-40 ~ +125	°C
Storage Temperature Range	T_{stg}	-40 ~ +125	°C

Pinning



Marking Code

DS24WS	SN
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Fig.1 Forward Current Derating Curve

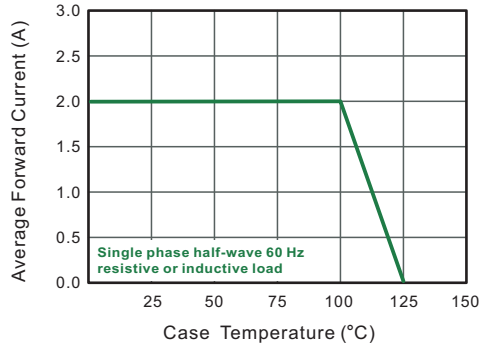


Fig.2 Typical Reverse Characteristics

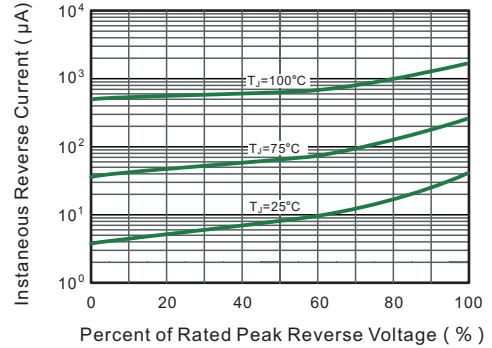


Fig.3 Typical Junction Capacitance

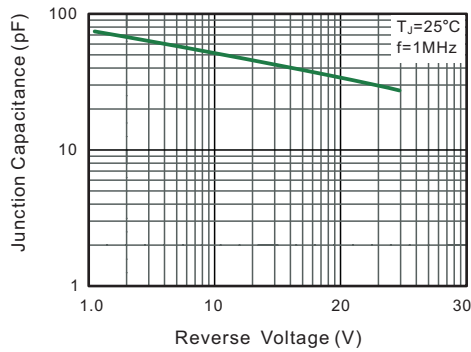


Fig.4 Typical Forward Characteristic

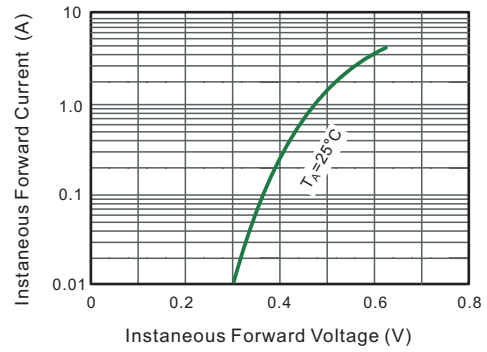
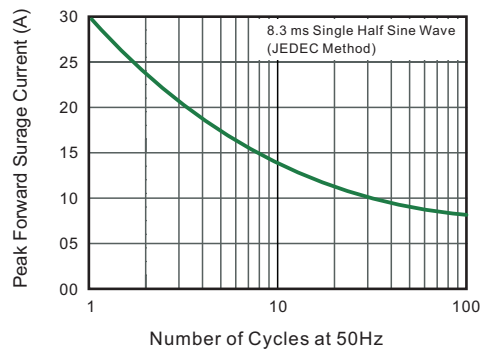


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Ordering information

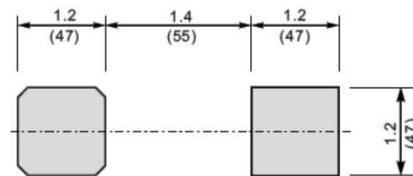
Package	Packing Description	Packing Quantity
SOD-323	Tape/Reel, 7" reel	3000PCS/Reel 120000PCS/Carton

Package Dimensions

SOD-323

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.8	1.1	32	43
C	0.08	0.15	3.1	5.9
D	1.2	1.4	47	55
E	1.4	1.8	63	70
E1	2.55	2.75	100	108
b	0.25	0.4	9.8	16
L1	0.2	0.45	7.9	16
A1	-	0.2	-	8
∠	9°			

The recommended mounting pad size



Unit: $\frac{\text{mm}}{\text{mil}}$

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