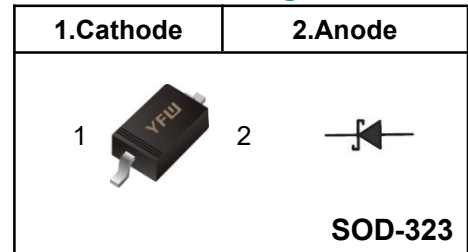


SCHOTTKY BARRIER DIODE
FEATURES

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

Pinning

Marking Code

BAT48WS	YFW S4
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Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	BAT48WS	Units
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
RMS reverse voltage	V_{RMS}	28	V
Working Peak Reverse Voltage	V_{DC}	40	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	V_F	$I_F=20mA$	0.37
		$I_F=200mA$	0.60
Power Dissipation	P_D	200	mW
Reverse current	I_R	5	uA
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	300	°C/W
Reverse voltage $I_R=100uA$	$V_{(BR)R}$	40	V
Reverse recovery time $I_F=I_R=200mA, I_{rr}=0.1 \times I_R, R_L=100\Omega$	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

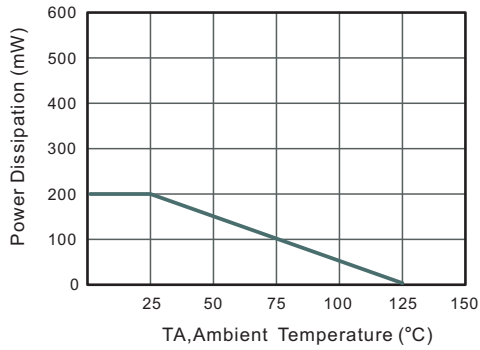


Fig.2 Typical Reverse Characteristics

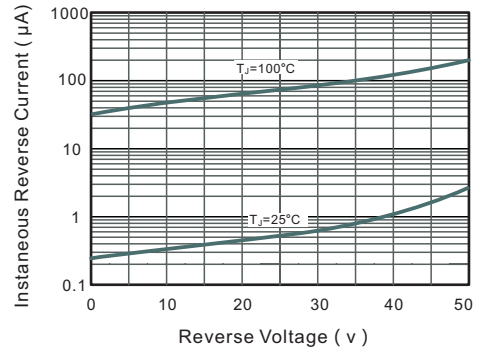


Fig.3 Forward Characteristics

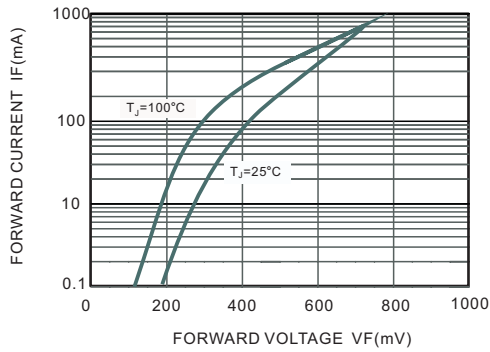


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current

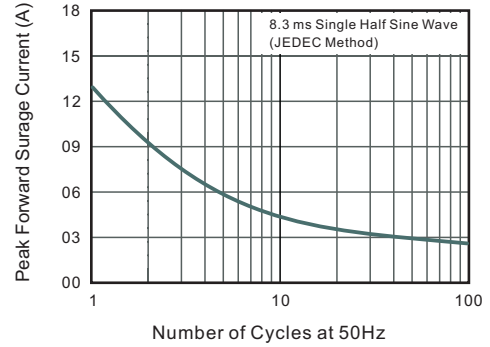


Fig.5 Typical Junction Capacitance

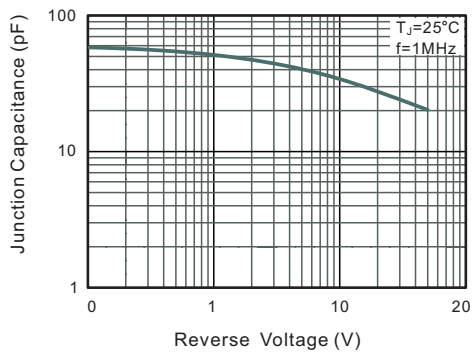
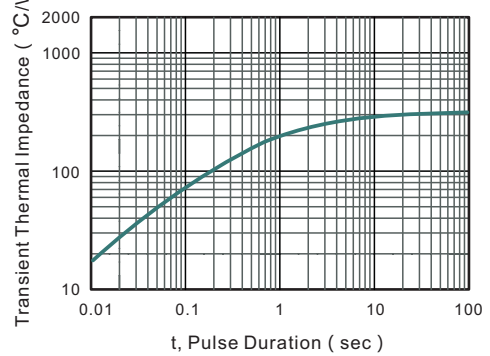


Fig.6 Typical Transient Thermal Impedance



Ordering information

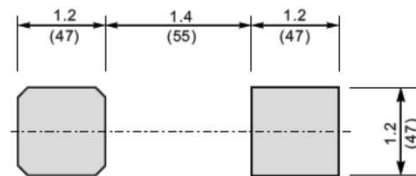
Package	Packing Description	Packing Quantity
SOD-323	Tape/Reel, 7" reel	3000PCS/Reel 120000PCS/Carton

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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