SCHOTTKY BARRIER DIODE

Pinning

1.Cathode	2.Anode

SOD-323

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

Marking Code	
1N5819WS	YFW S4
1N5818WS	S5
1N5817WS	S6

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter		Symbols	1N5819WS	1N5818WS	1N5817WS	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	1N5819WS,V_R=30V	I_R	5	-	-	uA
	1N5818WS,V_R=20V		-	5	-	
	1N5817WS,V_R=10V		-	-	5	
Thermal Resistance, Junction to Ambient Air		$R_{\theta JA}$	300			°C/W
Reverse voltage I_R=100uA	1N5819WS	$V_{(BR)R}$	40			V
	1N5818WS		30			
	1N5817WS		20			
Reverse recovery time I_F=I_R=200mA,Irr=0.1xIR, RL=100Ω		Trr	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

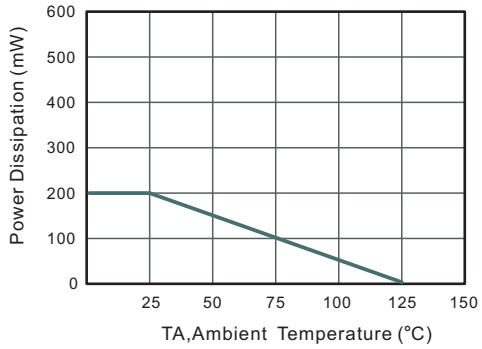


Fig.2 Typical Reverse Characteristics

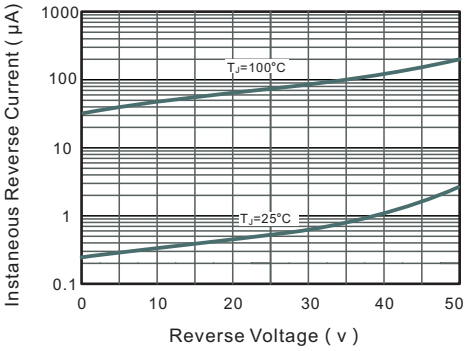


Fig.3 Forward Characteristics

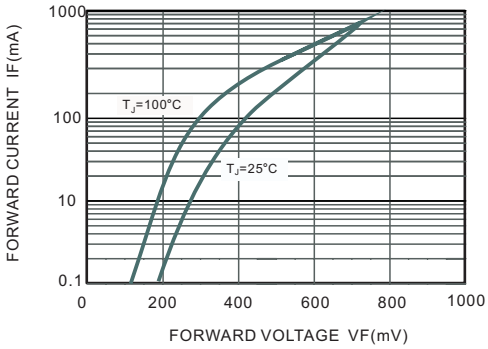


Fig.4 Maximum Non-Repetitive Peak Forward Surage Current

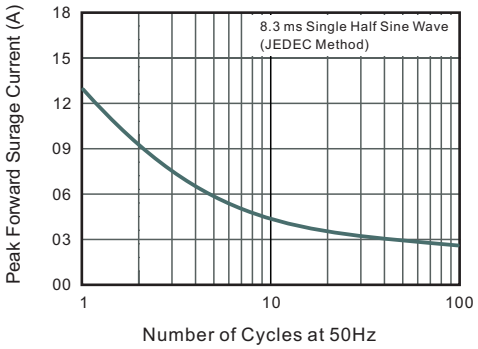


Fig.5 Typical Junction Capacitance

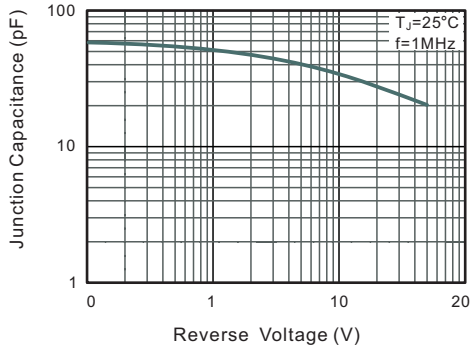
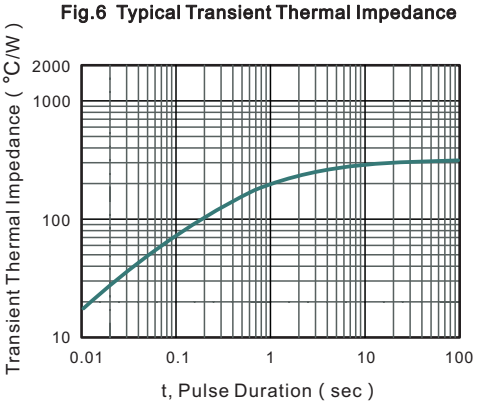


Fig.6 Typical Transient Thermal Impedance

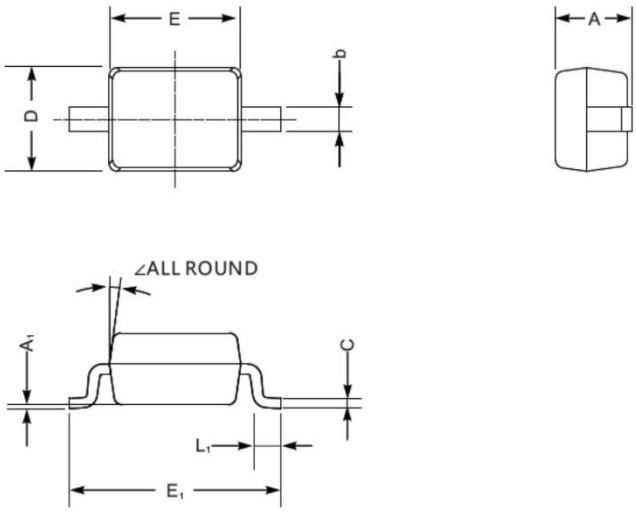


Ordering information

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

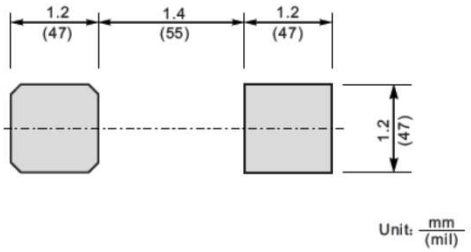
Package Dimensions

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



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