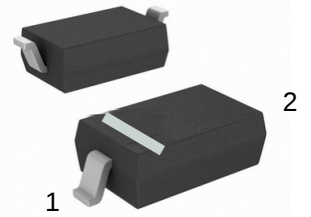


Descriptions

- Power dissipation PD: 200mW ($T_{amb}=25$);
- Collector current IF: 1 A;
- Collector-base voltage VR: 40 V;
- Low positive pressure drop, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

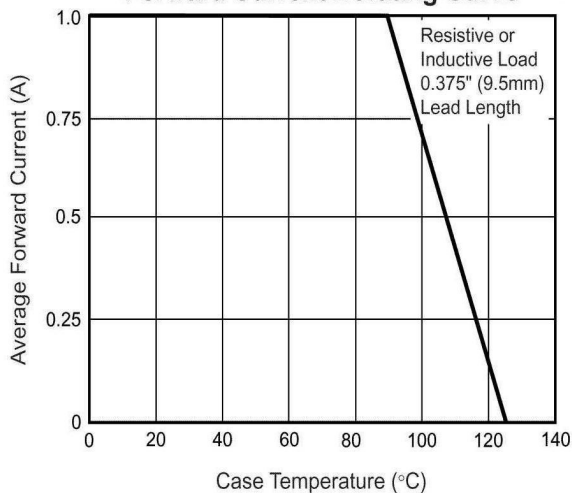
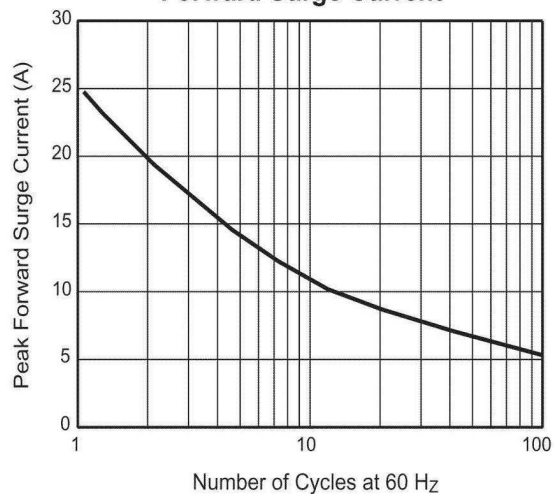
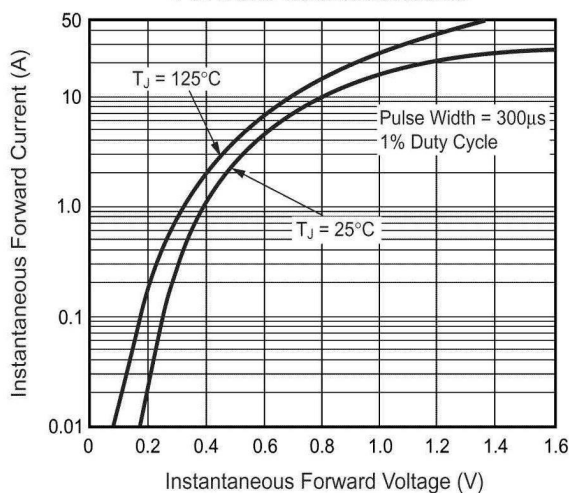
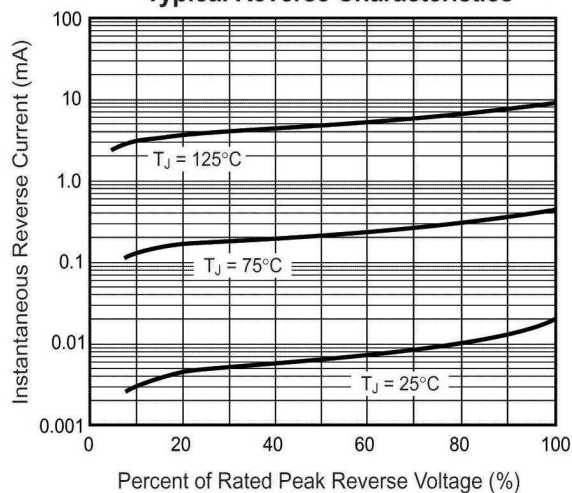
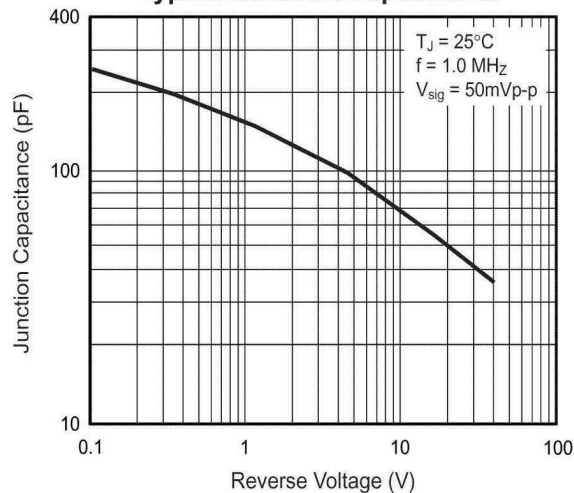
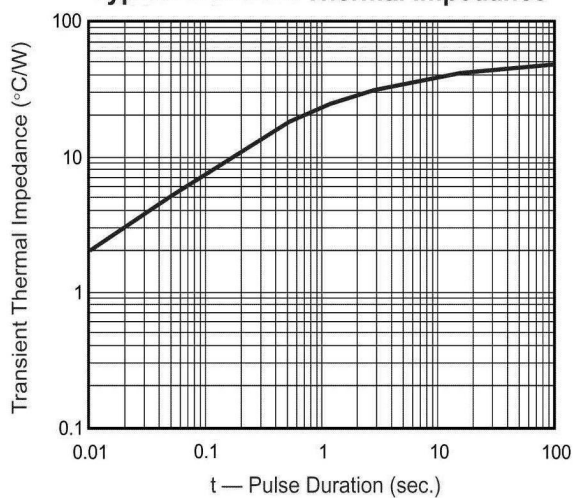

SOD323

Equivalent Circuit
Absolute Maximum Ratings($T_a=25^{\circ}\text{C}$)

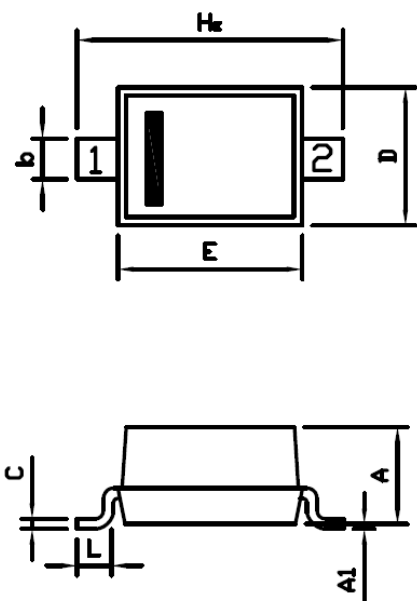
Parameter	Symbol	Rating	Unit
		1N5819WSQ	
Peak Repetitive Reverse Voltage , Working Peak Reverse Voltage, DC Reverse Voltage	V_{RRM} V_{RWM} , V_R	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	28.0	V
Average Rectified Forward Current	I_F	1	A
Non-Repetitive Peak Forward Surge Current	I_{FSM}	25	A
Power Dissipation	P_d	200	mW
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500	$^{\circ}\text{C}/\text{W}$
Junction and Storage Temperature Range	T_J, T_{stg}	-65 to 125	$^{\circ}\text{C}$

Electrical Characteristics($T_a=25^{\circ}\text{C}$)

Parameter	Symbol	Test Conditions	Rating		Unit
			MIN	MAX	
Reverse breakdown voltage	$V_{(BR)}$	$I_R=1\text{mA}$	40		V
Peak Forward Voltage	V_{FM}	$I_F=0.1\text{A}$		0.4	V
		$I_F=1\text{A}$		0.60	
		$I_F=3\text{A} (t<5\mu\text{s})$		0.90	
Instantaneous Reverse Current	I_{RM}	$V_R=V_{RWM}$	1		mA
Junction Capacitance	C_J	$V_R=4\text{V} \quad f=1.0\text{MHz}$	120		pF

Electrical Characteristic Curve
Forward Current Derating Curve

Maximum Non-Repetitive Peak Forward Surge Current

Typical Instantaneous Forward Characteristics

Typical Reverse Characteristics

Typical Junction Capacitance

Typical Transient Thermal Impedance


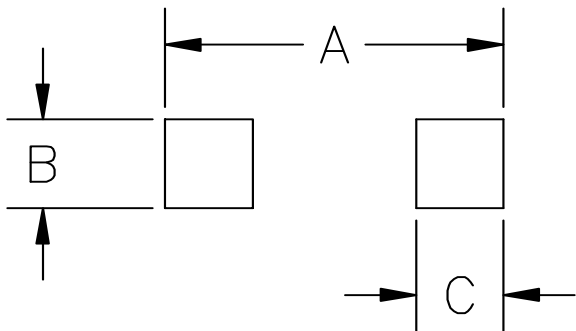
Package Dimensions



Unit: mm

	SOD-323	
	min	max
A	0.80	1.15
A1	0.00	0.20
b	0.25	0.40
C	0.08	0.18
D	1.20	1.40
E	1.40	1.80
H _E	2.50	2.80
L	0.20	0.45

SOT-23 Suggested Pad Layout



SYM	DIMENSIONS	
	MILLIMETERS	INCHES
A	3.15	0.120
B	0.80	0.031
C	0.80	0.031