

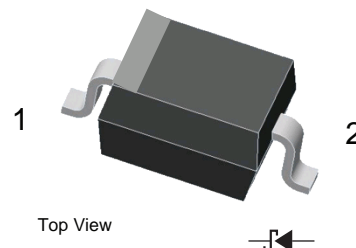
Schottky Diodes

NSR0320WS

■ Features

- Low Forward Voltage – 0.24 Volts (Typ) @ $I_F = 10 \text{ mAdc}$
- High Current Capability

SOD-323



PIN DESCRIPTION

PIN	DESCRIPTION
1	Cathode
2	Anode

■ Absolute Maximum Ratings ($T_J = 125^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Rating	Unit
Reverse Voltage	V_R	20	V
Peak Reverse Voltage	V_{RM}	23	
Forward Current (DC) Continuous	I_F	1	A
Forward Current $t = 8.3 \text{ ms}$ Half Sinewave	I_F	5	
Forward Power Dissipation @ $T_A = 25^\circ\text{C}$	P_F	200	mW
Junction Temperature	T_J	-55 to 125	$^\circ\text{C}$
Storage Temperature range	T_{stg}	-55 to 150	

■ Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V_R	$I_R = 100 \mu\text{A}$	20			V
Forward voltage	V_{F1}	$I_F = 10 \text{ mA}$			0.27	
	V_{F2}	$I_F = 100 \text{ mA}$			0.35	
	V_{F3}	$I_F = 900 \text{ mA}$			0.50	
Reverse voltage leakage current	I_{R1}	$V_R = 15 \text{ V}$			50	μA
	I_{R2}	$V_R = 2 \text{ V @ } 85^\circ\text{C}$			300	
	I_{R3}	$V_R = 15 \text{ V @ } 85^\circ\text{C}$			1000	
Total Capacitance	C_T	$V_R = 5 \text{ V}, f = 1 \text{ MHz}$		25	29	pF

■ Marking

Marking	SJ
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■ Typical Characteristics

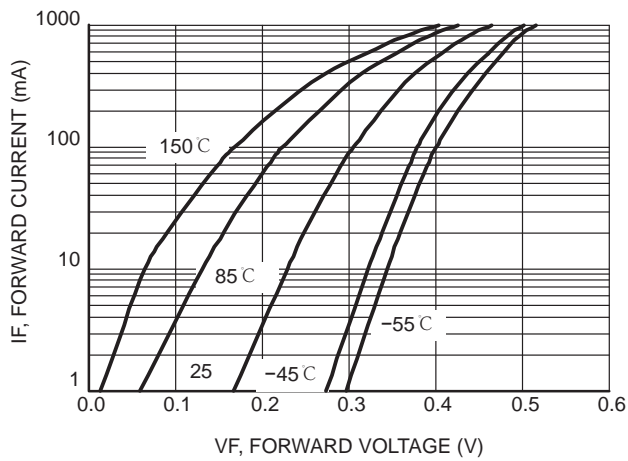


Figure 1. Forward Voltage

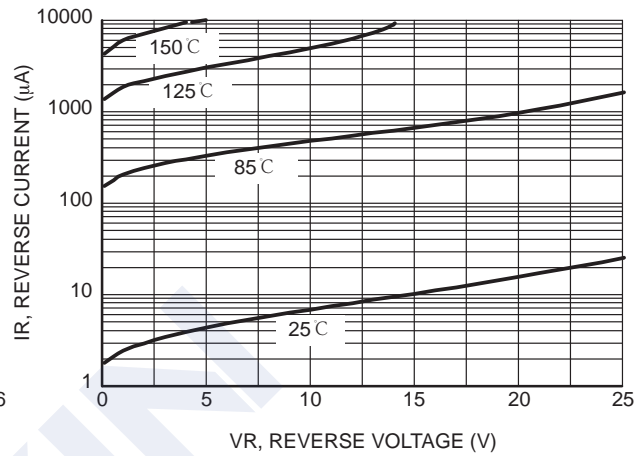


Figure 2. Leakage Current

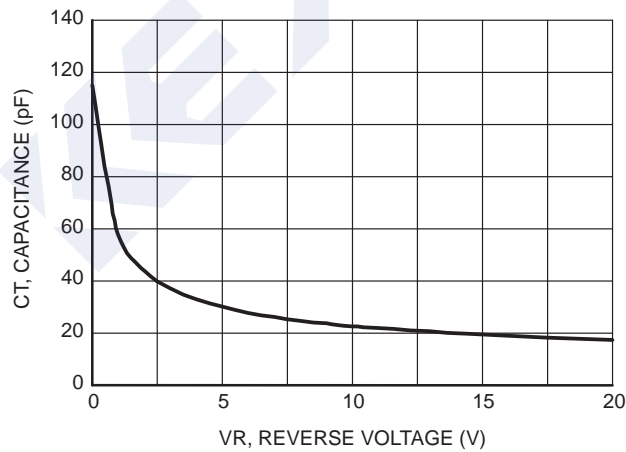


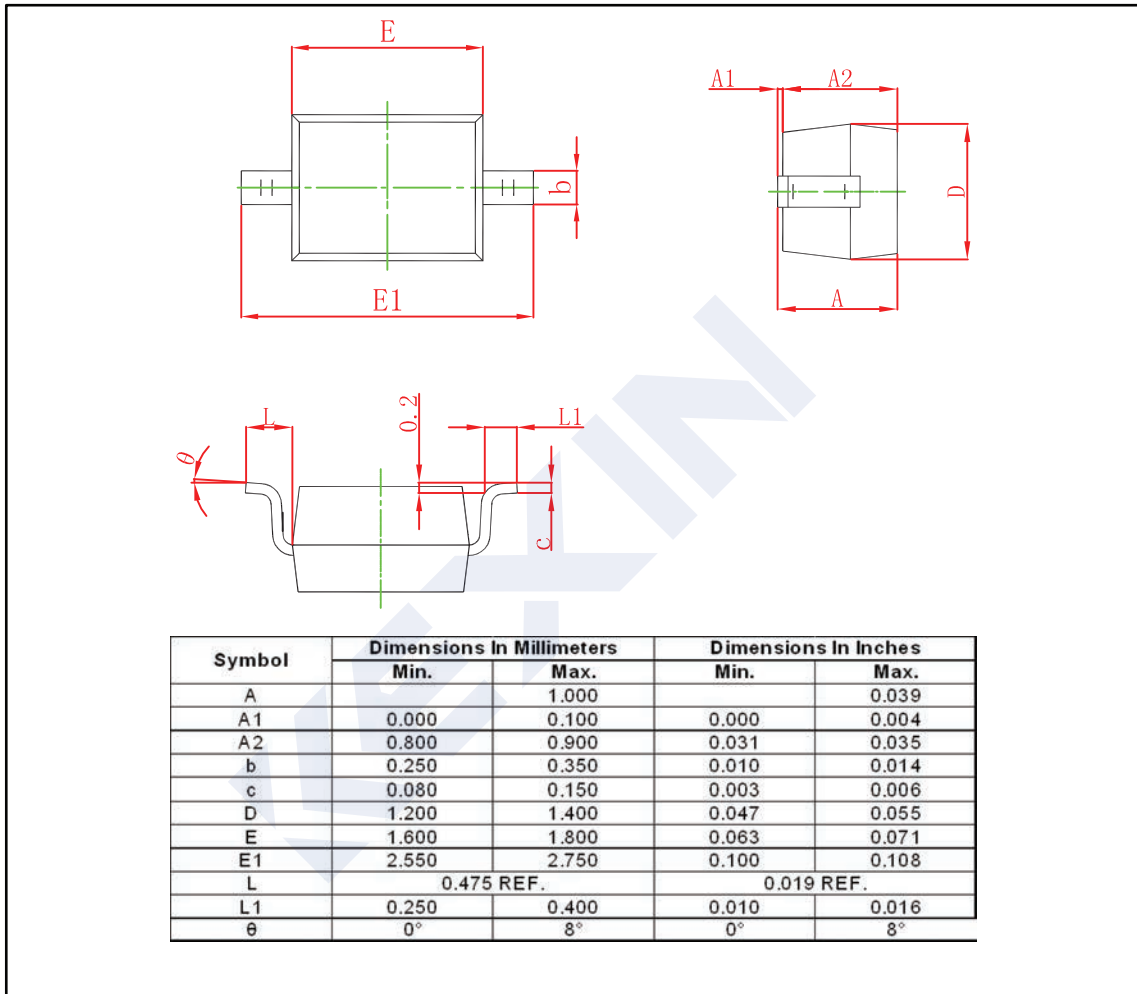
Figure 3. Total Capacitance

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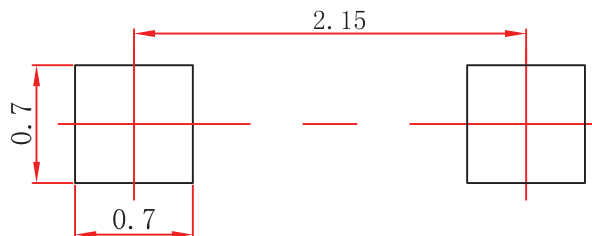
■ Package Outline Dimensions

Plastic surface mounted package; 2 leads

SOD-323



■ The Recommended Mounting Pad Size



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.