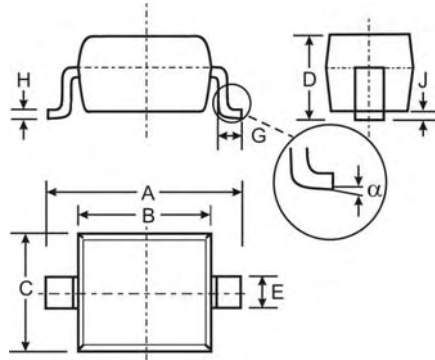


**Features**

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Fast Switching Speed
- Low Capacitance
- Surface Mount Package Ideally Suited for Automatic Insertion
- **Lead Free/RoHS Compliant (Note 3)**

**Mechanical Data**

- Case: SOD-323
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Solderable per MIL-STD-202, Method 208
- Lead Free Plating (Matte Tin Finish annealed over Alloy 42 leadframe).
- Polarity: Cathode Band
- Marking Information: See Page 3
- Ordering Information: See Page 3
- Weight: 0.004 grams (approximate)



SOD-323		
Dim	Min	Max
A	2.30	2.70
B	1.60	1.80
C	1.20	1.40
D	1.05 Typical	
E	0.25	0.35
G	0.20	0.40
H	0.10	0.15
J	0.05 Typical	
$\alpha$	0°	8°
<b>All Dimensions in mm</b>		

**Maximum Ratings** @ $T_A = 25^\circ\text{C}$  unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	70	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Blocking Voltage	$V_R$		
RMS Reverse Voltage	$V_{R(RMS)}$	49	V
Forward Continuous Current	$I_{FM}$	15	mA
Power Dissipation (Note 1)	$P_D$	150	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	650	$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_j$	-55 to +125	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150	$^\circ\text{C}$

**Electrical Characteristics** @ $T_A = 25^\circ\text{C}$  unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Reverse Breakdown Voltage (Note 2)	$V_{(BR)R}$	70	—	—	V	$I_R = 10\mu\text{A}$
Reverse Leakage Current (Note 2)	$I_R$	—	—	200	nA	$V_R = 50\text{V}$
Forward Voltage Drop	$V_F$	—	—	0.41 1.00	V	$I_F = 1.0\text{mA}$ $I_F = 15\text{mA}$
Total Capacitance	$C_T$	—	—	2.0	pF	$V_R = 0\text{V}$ , $f = 1.0\text{MHz}$
Reverse Recovery Time	$t_{rr}$	—	—	1.0	ns	$I_F = I_R = 5.0\text{mA}$ , $I_{rr} = 0.1 \times I_R$ , $R_L = 100\Omega$

- Note:
1. Part mounted on FR-4 PC board with recommended pad layout, which can be found on our website at <http://www.diodes.com/datasheets/ap02001.pdf>.
  2. Short duration test pulse used to minimize self-heating effect.
  3. No purposefully added lead.

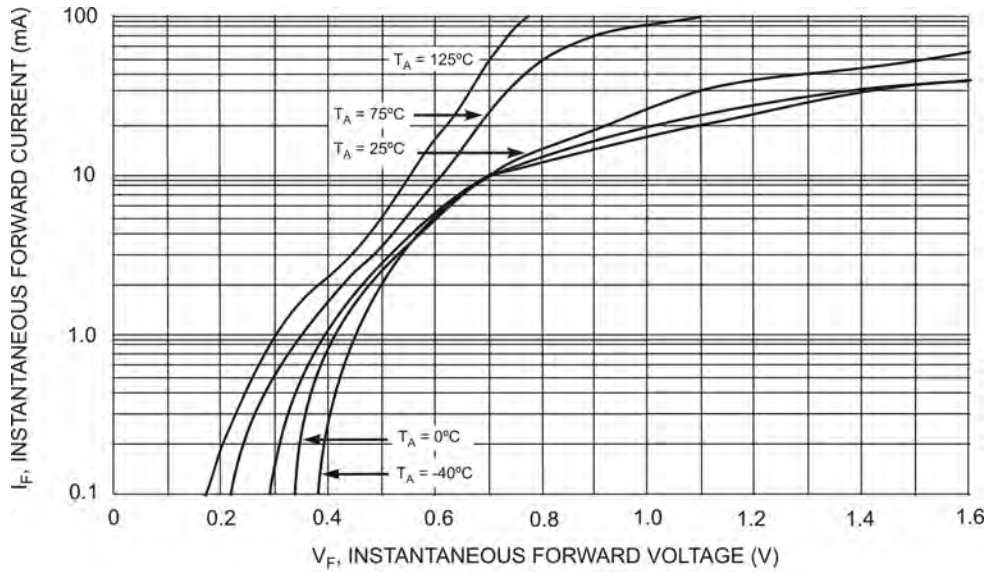


Fig. 1 Typical Forward Characteristics

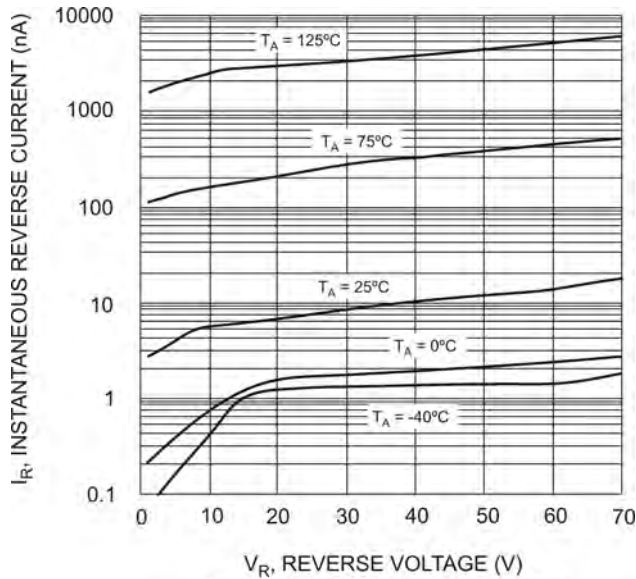


Fig. 2 Typical Reverse Characteristics

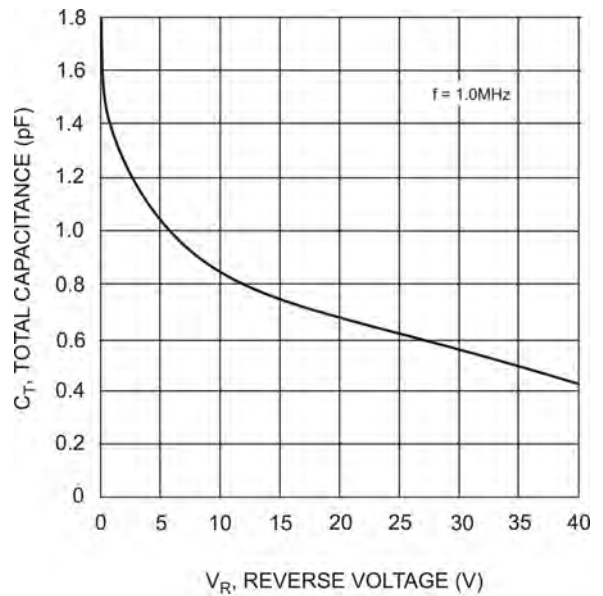


Fig. 3 Typical Capacitance

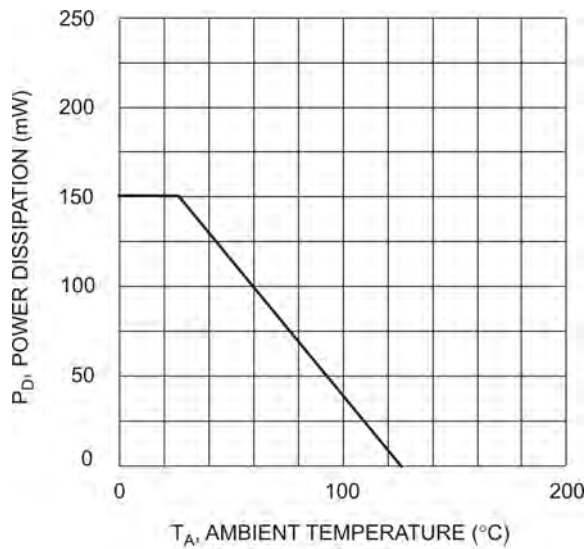


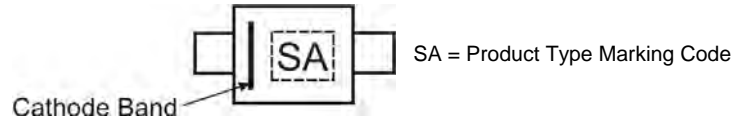
Fig. 4 Power Derating Curve

## Ordering Information (Note 4)

Device	Packaging	Shipping
1N5711WS-7-F	SOD-323	3000/Tape & Reel

Notes: 4. For Packaging Details, go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.

## Marking Information



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