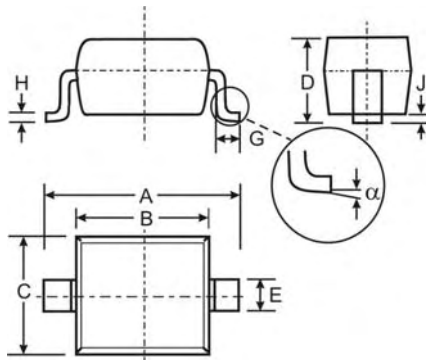


## Features

- 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	
α	0°	8°
All Dimensions in mm		

## Maximum Ratings @T<sub>A</sub> = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	70	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	49	V
Forward Continuous Current	I <sub>FM</sub>	15	mA
Power Dissipation (Note 1)	P <sub>D</sub>	150	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	R <sub>θJA</sub>	650	°C/W
Operating Temperature Range	T <sub>j</sub>	-55 to +125	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

## Electrical Characteristics @T<sub>A</sub> = 25°C unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Reverse Breakdown Voltage (Note 2)	V <sub>(BR)R</sub>	70	—	—	V	I <sub>R</sub> = 10μA
Reverse Leakage Current (Note 2)	I <sub>R</sub>	—	—	200	nA	V <sub>R</sub> = 50V
Forward Voltage Drop	V <sub>F</sub>	—	—	0.41 1.00	V	I <sub>F</sub> = 1.0mA I <sub>F</sub> = 15mA
Total Capacitance	C <sub>T</sub>	—	—	2.0	pF	V <sub>R</sub> = 0V, f = 1.0MHz
Reverse Recovery Time	t <sub>rr</sub>	—	—	1.0	ns	I <sub>F</sub> = I <sub>R</sub> = 5.0mA, I <sub>rr</sub> = 0.1 x I <sub>R</sub> , R <sub>L</sub> = 100Ω

- 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.

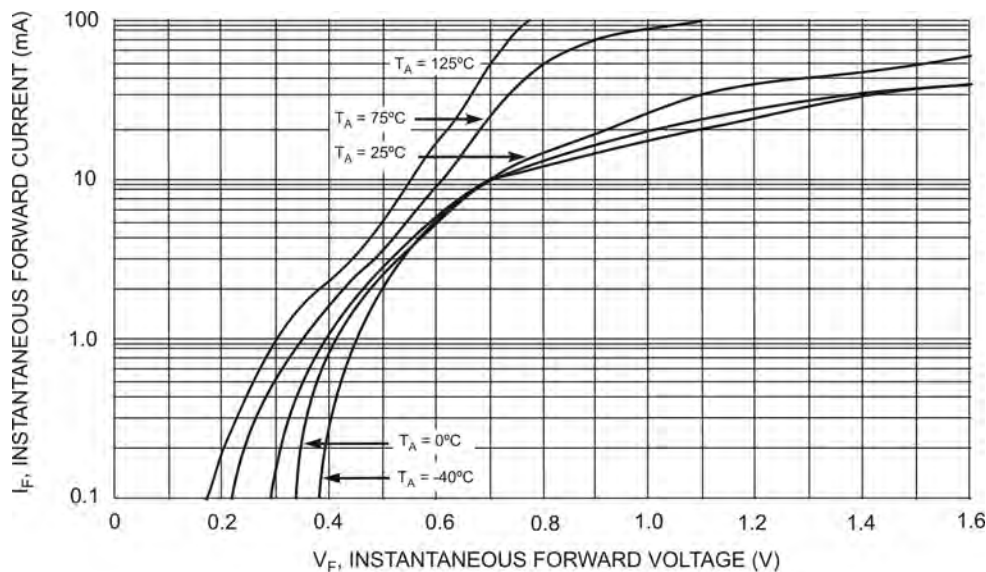


Fig. 1 Typical Forward Characteristics

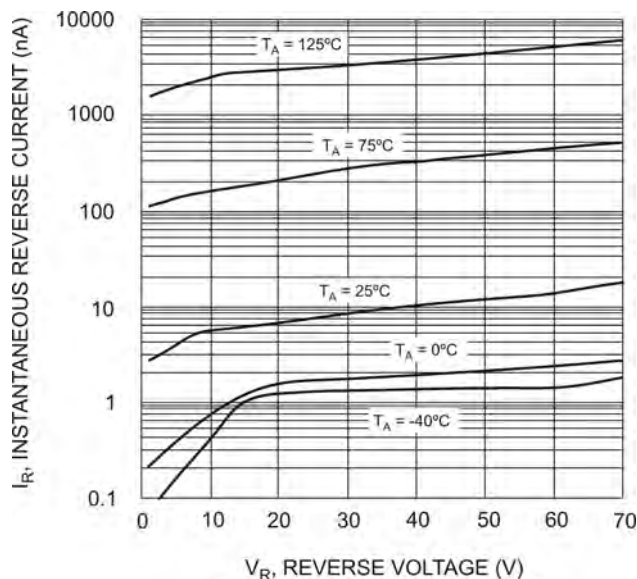


Fig. 2 Typical Reverse Characteristics

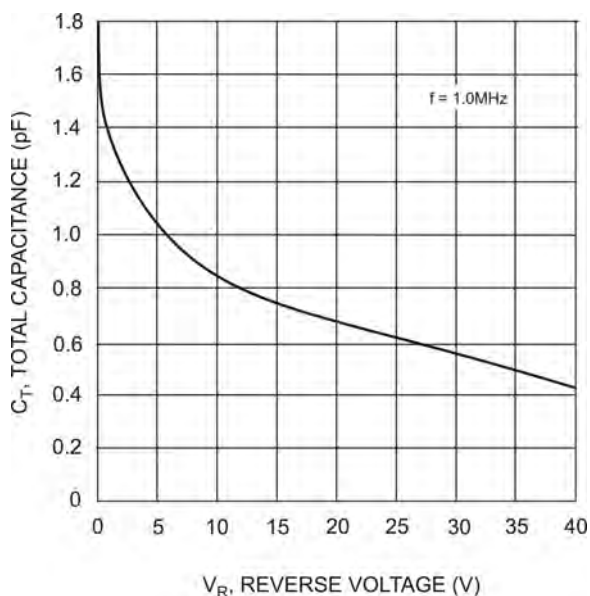


Fig. 3 Typical Capacitance

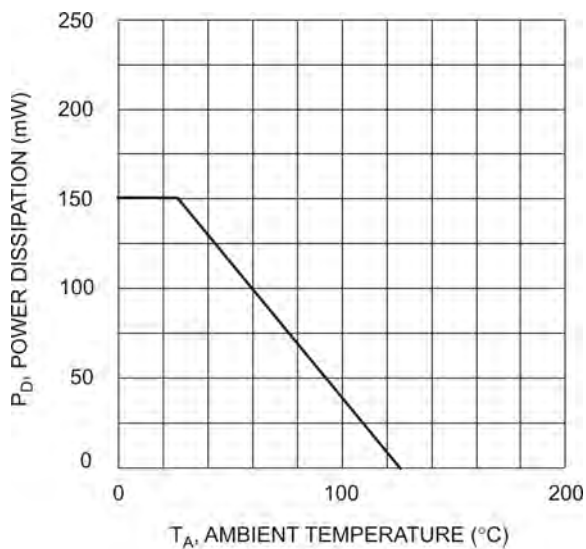


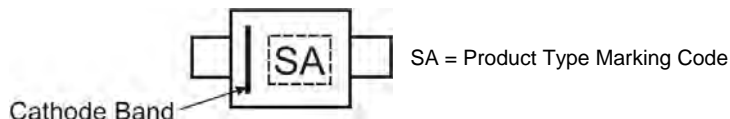
Fig. 4 Power Derating Curve

## 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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