



# 1N5711WS

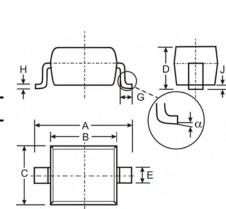
SURFACE MOUNT SCHOTTKY BARRIER DIODE

#### **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, Halogen and Antimony Free, RoHS Compliant "Green" Device (Notes 3 and 4)

# **Mechanical Data**

- Case: SOD-323
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020D
- 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	
Α	2.30	2.70	
В	1.60	1.80	
С	1.20	1.40	
D	1.05 Typical		
Е	0.25	0.35	
G	0.20	0.40	
Н	0.10	0.15	
J	0.05 Typical		
α	0°	8°	
All Dimensions in mm			

Maximum Ratings	$@T_A = 25^{\circ}C$ unless otherwise specified
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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	Vr(rms)	49	V
Forward Continuous Current	I <sub>FM</sub>	15	mA
Power Dissipation (Note 1)	PD	150	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	R <sub>0</sub> JA	650	°C/W
Operating Temperature Range	TJ	-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	Тур	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	CT	_	_	2.0	pF	$V_{R} = 0V, f = 1.0MHz$
Reverse Recovery Time	t <sub>rr</sub>			1.0	ns	$\begin{split} I_F &= I_R = 5.0 \text{mA}, \\ I_{\text{rr}} &= 0.1 \text{ x } I_R, \text{ R}_L = 100 \Omega \end{split}$

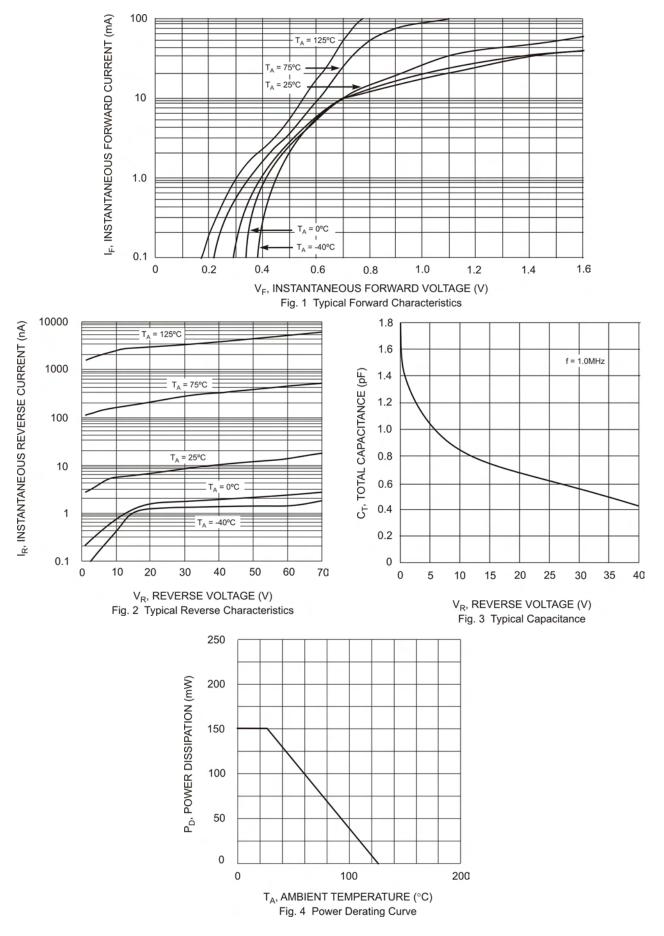
Notes: 1. Part mounted on FR-4 PC board with recommended pad layout, which can be found on our website at http://www.diodes.com/datasheets/ap02001.pdf.

3. No purposefully added lead. Halogen and Antimony Free.

Product manufactured with Data Code V9 (week 33, 2008) and newer are built with Green Molding Compound. Product manufactured prior to Date Code V9 are built with Non-Green Molding Compound and may contain Halogens or Sb<sub>2</sub>O<sub>3</sub> Fire Retardants.

<sup>2.</sup> Short duration test pulse used to minimize self-heating effect.







# Ordering Information (Note 5)

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

Notes: 5. For packaging details, go to our website at http://www.diodes.com/datasheets/ap02007.pdf.

### **Marking Information**



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