



# <u>1N5711W</u>

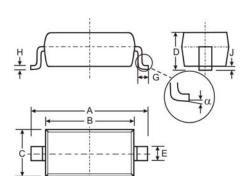
SURFACE MOUNT SCHOTTKY BARRIER DIODE

## Features

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

# Mechanical Data

- Case: SOD-123
- 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: 0.01 grams (approximate)



SOD-123									
Dim	Min	Max							
Α	3.55	3.85							
В	2.55	2.85							
С	1.40 1.70								
D	_	1.35							
Е	0.45	0.65							
E	0.55 Typical								
G	0.25	_							
н	0.11 T	Typical							
J	_	0.10							
α	0°	8°							
All Dimensions in mm									

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

Characteristic	Symbol	Value	Unit		
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>				
Working Peak Reverse Voltage	V <sub>RWM</sub>	70	V		
DC Blocking Voltage	V <sub>R</sub>				
RMS Reverse Voltage	V <sub>R(RMS)</sub>	49	V		
Maximum Forward Current	I <sub>FM</sub>	15	mA		
Power Dissipation (Note 1)	Pd	333	mW		
Thermal Resistance, Junction to Ambient Air (Note 1)	R <sub>0JA</sub>	300	°C/W		
Operating Temperature Range	Tj	-55 to +125	°C		
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	O°		

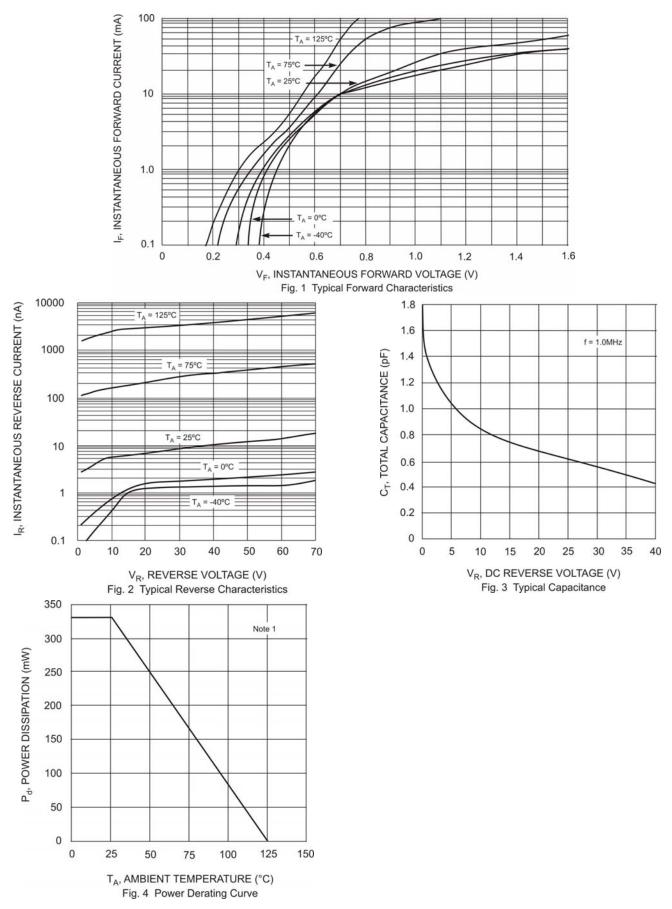
## **Electrical Characteristics** @T<sub>A</sub> = 25°C unless otherwise specified

Characteristic	Symbol	Min	Тур	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 2)	V <sub>(BR)R</sub>	70	_		V	I <sub>R</sub> = 10μA
Forward Voltage Drop	V <sub>F</sub>	_		0.41 1.00	V	I <sub>F</sub> = 1.0mA I <sub>F</sub> = 15mA
Reverse Leakage Current (Note 2)	I <sub>R</sub>	_	_	200	nA	$V_R = 50V$
Total Capacitance	CT	_	_	2.0	pF	$V_{R} = 0V, f = 1.0MHz$
Reverse Recovery Time	t <sub>rr</sub>	_	_	1.0		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

Notes: 1. Part mounted on FR-4 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.







### Ordering Information (Note 4)

Device	Packaging	Shipping
1N5711W-7-F	SOD-123	3000/Tape and Reel

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

## **Marking Information**



 $\begin{array}{l} \mathsf{SA} = \mathsf{Product} \ \mathsf{Type} \ \mathsf{Marking} \ \mathsf{Code} \\ \mathsf{YM} = \mathsf{Date} \ \mathsf{Code} \ \mathsf{Marking} \\ \mathsf{Y} = \mathsf{Year} \ (\mathsf{ex:} \ \mathsf{T} = 2006) \\ \mathsf{M} = \mathsf{Month} \ (\mathsf{ex:} \ 9 = \mathsf{September}) \end{array}$ 

Date Code Key

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Code	J	К	L	М	Ν	Р	R	S	Т	U	V	W	Х	Y	Z
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