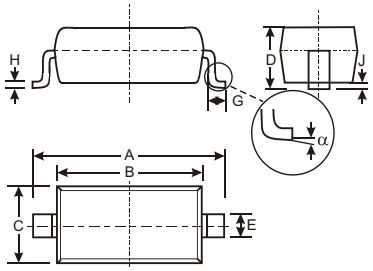
1N6263W

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



SOD-123		
Dim	**Min**	**Max**
A	3.55	3.85
B	2.55	2.85
C	1.40	1.70
D	—	1.35
E	0.55 Typical	
G	0.25	—
H	0.11 Typical	
J	—	0.10
α	0°	8°
All Dimensions in mm		

Mechanical Data

- Case: SOD-123, Plastic
- Case material - UL Flammability Rating Classification 94V-0
- Moisture sensitivity: Level 1 per J-STD-020A
- Terminals: Solderable per MIL-STD-202, Method 208
- Also Available in Lead Free Plating (Matte Tin Finish). Please see Ordering Information, Note 4, on Page 3
- Polarity: Cathode Band
- Marking: Date Code and Type Code, See Page 3
- Type Code: SB
- Weight: 0.01 grams (approx.)
- Ordering Information: See Page 3

Maximum Ratings @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	60	V
RMS Reverse Voltage	$V_{R(RMS)}$	42	V
Forward Continuous Current	I_F	15	mA
Non-Repetitive Peak Forward Surge Current @ t ≤ 1.0s @ t = 10ms	I_{FSM}	50 2.0	mA A
Power Dissipation (Note 1)	P_D	333	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	300	°C/W
Operating Temperature Range	T_j	-55 to +125	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

Note: 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.

Electrical Characteristics @ $T_A = 25°C$ unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 2)	$V_{(BR)R}$	60	—	—	V	$I_R = 10\mu A$
Reverse Leakage Current (Note 2)	I_{RM}	—	—	200	nA	$V_R = 50V$
Forward Voltage Drop	V_{FM}	—	—	0.41 1.0	V	$I_F = 1.0mA$ $I_F = 15mA$
Total Capacitance	C_T	—	—	2.2	pF	$V_R = 0V$, f = 1.0MHz
Reverse Recovery Time	t_{rr}	—	—	1.0	ns	$I_F = I_R = 5.0mA$ $I_{rr} = 0.1 \times I_R$, $R_L = 100\Omega$

Note: 2. Short duration test pulse used to minimize self-heating effect.

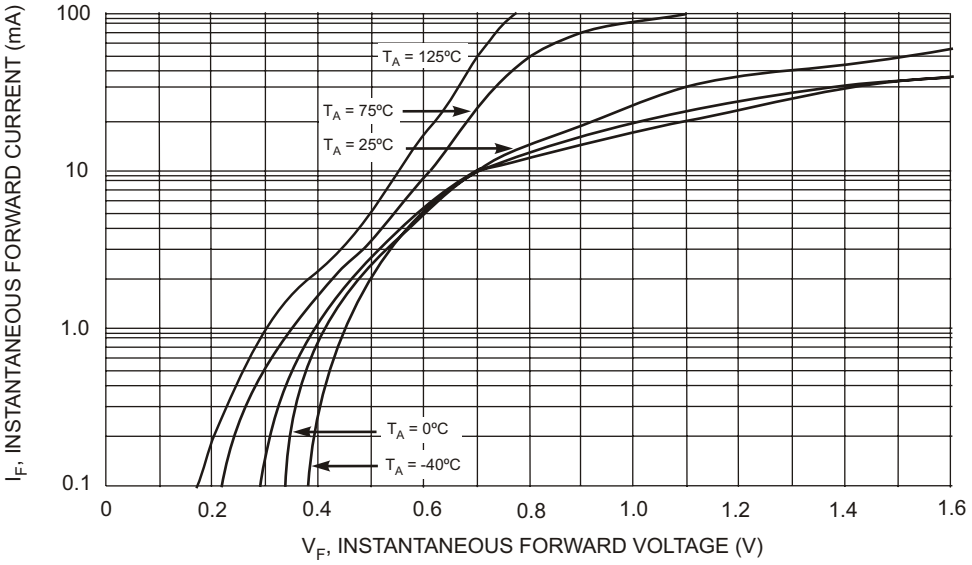


Fig. 1 Typical Forward Characteristics

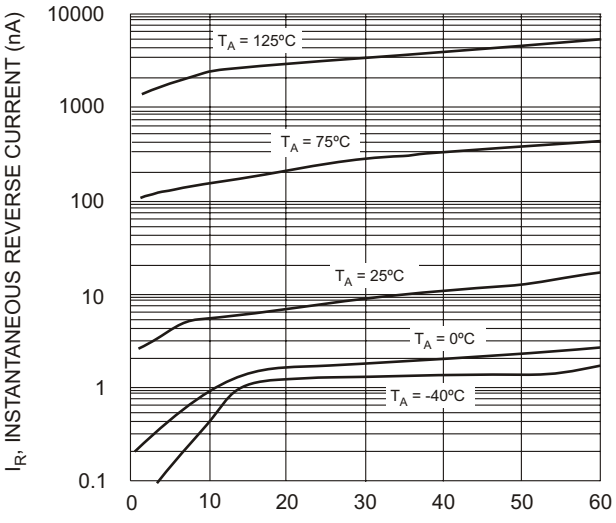


Fig. 2 Typical Reverse Characteristics

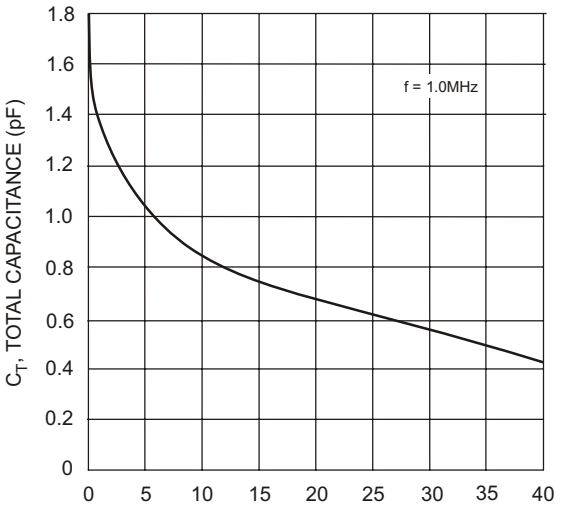


Fig. 3 Typical Capacitance

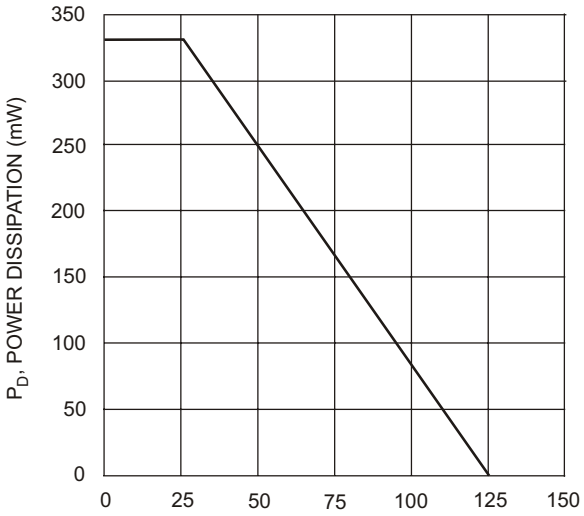


Fig. 4 Power Derating Curve

Ordering Information (Note 3)

Device	Packaging	Shipping
1N6263W-7	SOD-123	3000/Tape and Reel

Note: 3. For Packaging Details, go to our website at http://www.diodes.com/datasheets/ap02007.pdf.
4. For Lead Free version (with Lead Free terminal finish) part number, please add "-F" suffix to part number above. Example: 1N6263W-7-F.

Marking Information

SB = Product Type Marking Code
YM = Date Code Marking
Y = Year (ex: N = 2002)
M = Month (ex: 9 = September)

Date Code Key

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Code	J	K	L	M	N	P	R	S	T	U	V	W

Month	Jan	Feb	March	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Code	1	2	3	4	5	6	7	8	9	O	N	D