NSR0320XV6T1

Schottky Barrier Diode

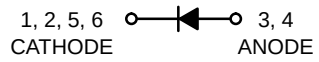
These Schottky barrier diodes are designed for high current, handling capability, and low forward voltage performance.

- Low Forward Voltage − 0.35 Volts (Typ) @ I_F = 10 mAdc
- High Current Capability

ON Semiconductor®

http://onsemi.com

HIGH CURRENT SCHOTTKY BARRIER DIODE



MAXIMUM RATINGS (T_J = 125°C unless otherwise noted)

Rating	Symbol	Value	Unit
Reverse Voltage	V_R	23	V
Forward Power Dissipation @ T_A = 25°C Derate above 25°C	P_F	 200 2.0	 mW mW/°C
Forward Current (DC) Continuous	I_F	 1	 A
Forward Current t = 8.3 ms Half Sinewave; JEDEC Method	I_F	 7.5	 A
Junction Temperature	T_J	125 Max	°C
Storage Temperature Range	T_{stg}	−55 to +150	°C

MARKING DIAGRAM

RD = Specific Device Code
D = Date Code

ORDERING INFORMATION

Device	Package	Shipping
NSR0320XV6T1	SOT−563	3000/Tape & Reel

July, 2003 − Rev. 2

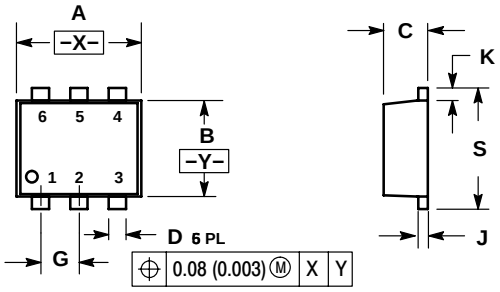
Publication Order Number:
NSR0320XV6T1/D

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

Characteristic	Symbol	Min	Typ	Max	Unit
Total Capacitance (V_R = 5.0 V, f = 1.0 MHz)	C_T	−	30	35	pF
Reverse Leakage (V_R = 15 V)	I_R	−	10	50	μAdc
Forward Voltage (I_F = 10 mAdc)	V_F	−	0.24	0.27	Vdc
Forward Voltage (I_F = 100 mAdc)	V_F	−	0.30	0.35	Vdc
Forward Voltage (I_F = 900 mAdc)	V_F	−	0.45	0.50	Vdc

PACKAGE DIMENSIONS

SOT−563, 6 LEAD
PLASTIC PACKAGE
CASE 463A−01
ISSUE O



NOTES:
1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH THICKNESS. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.

	MILLIMETERS		INCHES	
DIM	MIN	MAX	MIN	MAX
A	1.50	1.70	0.059	0.067
B	1.10	1.30	0.043	0.051
C	0.50	0.60	0.020	0.024
D	0.17	0.27	0.007	0.011
G	0.50 BSC		0.020 BSC	
J	0.08	0.18	0.003	0.007
K	0.10	0.30	0.004	0.012
S	1.50	1.70	0.059	0.067

STYLE 1:
PIN 1. EMITTER 1
2. BASE 1
3. COLLECTOR 2
4. EMITTER 2
5. BASE 2
6. COLLECTOR 1

STYLE 2:
PIN 1. EMITTER 1
2. EMITTER2
3. BASE 2
4. COLLECTOR 2
5. BASE 1
6. COLLECTOR 1

STYLE 3:
PIN 1. CATHODE 1
2. CATHODE 1
3. ANODE/ANODE 2
4. CATHODE 2
5. CATHODE 2
6. ANODE/ANODE 1

STYLE 4:
PIN 1. COLLECTOR
2. COLLECTOR
3. BASE
4. EMITTER
5. COLLECTOR
6. COLLECTOR

PUBLICATION ORDERING INFORMATION

Literature Fulfillment:
Literature Distribution Center for ON Semiconductor
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For additional information, please contact your local
Sales Representative.