

SCHOTTKY BARRIER DIODE

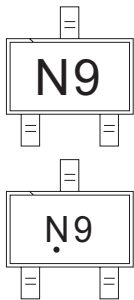
**FEATURES**

- Small Package
- Low Forward Voltage

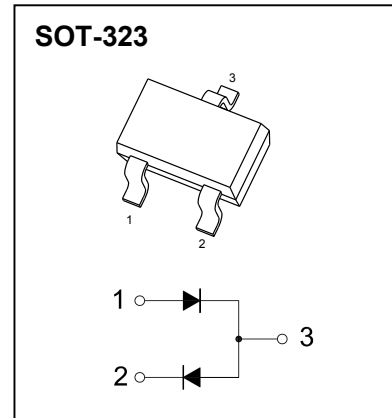
**APPLICATIONS**

- High Speed Switching

**MARKING: N9**



Solid dot = Green molding compound device, if none, the normal device



**MAXIMUM RATINGS ( T<sub>a</sub>=25°C unless otherwise noted )**

Symbol	Parameter	Value	Unit
V <sub>R</sub>	DC Blocking Voltage	10	V
I <sub>o</sub>	Forward Continuous Current	100	mA
I <sub>FM</sub>	Peak Forward Current	200	mA
I <sub>FSM</sub>	Non-respetitive Peak Forward Surge Current@t=8.3ms	1	A
P <sub>D</sub>	Power Dissipation	100	mW
R <sub>θJA</sub>	Thermal Resistance From Junction To Ambient	1000	°C/W
T <sub>j</sub>	Junction Temperature	125	°C
T <sub>stg</sub>	Storage Temperature	-55~+150	°C

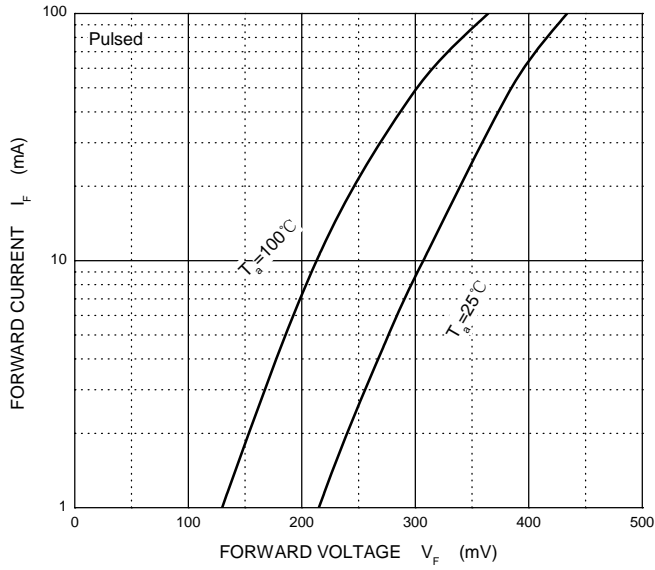
**ELECTRICAL CHARACTERISTICS(T<sub>a</sub>=25°C unless otherwise specified)**

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	V <sub>(BR)</sub>	I <sub>R</sub> =100μA	10			V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =10V			20	μA
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =1mA		0.18		V
		I <sub>F</sub> =5mA		0.3		
		I <sub>F</sub> =100mA			0.5	
Total capacitance	C <sub>tot</sub>	V <sub>R</sub> =0V,f=1MHz			40	pF

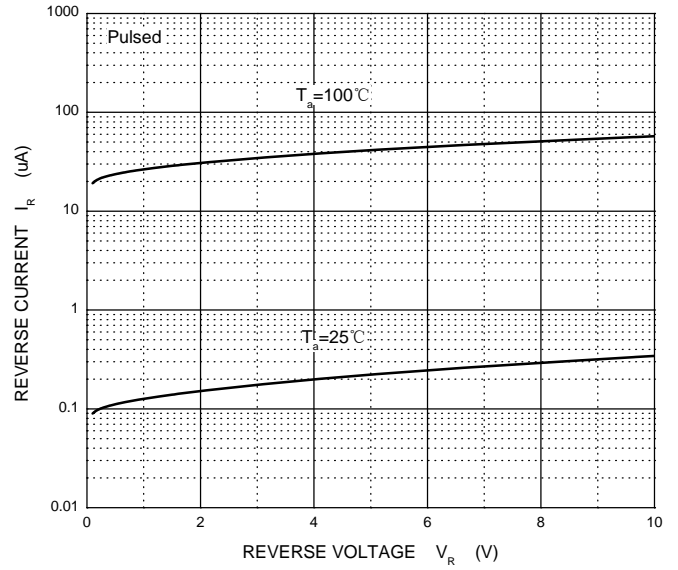


Typical Characteristics

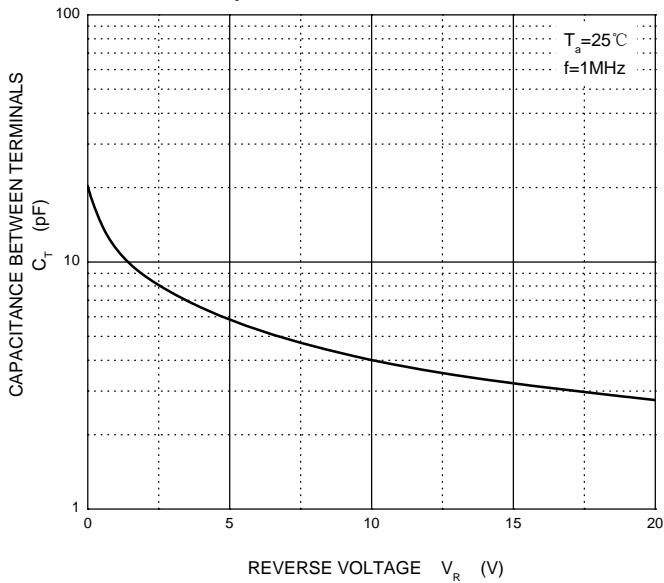
Forward Characteristics



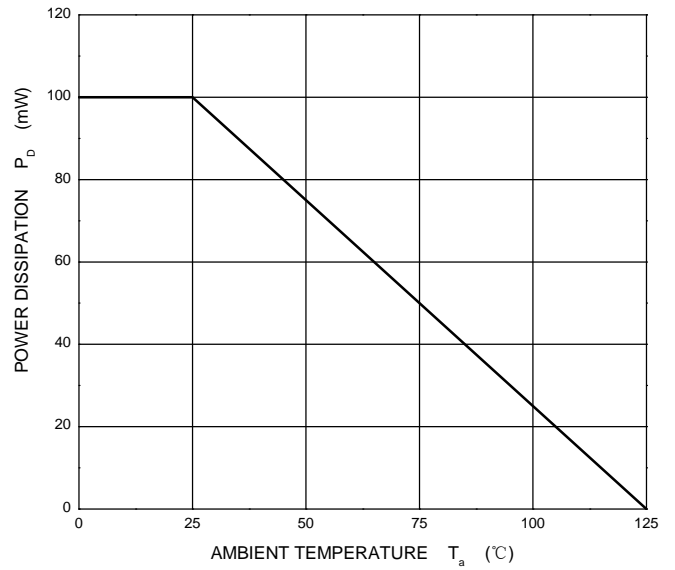
Reverse Characteristics



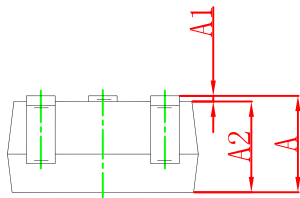
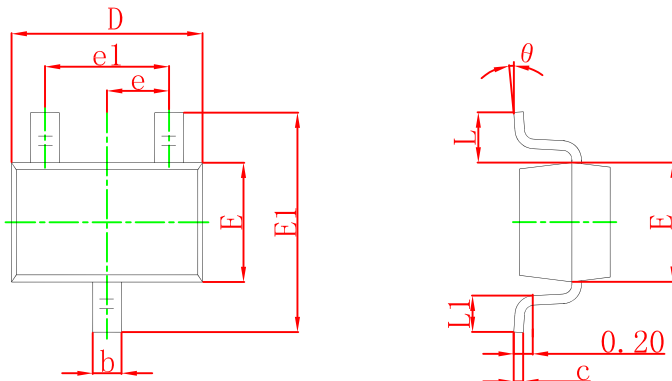
Capacitance Characteristics



Power Derating Curve

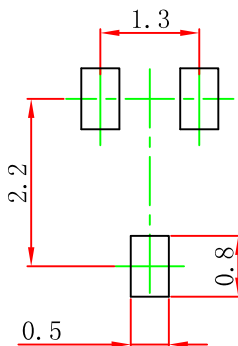


SOT-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

SOT-323 Suggested Pad Layout



- Note:
1. Controlling dimension: in millimeters.
  2. General tolerance: ±0.05mm.
  3. The pad layout is for reference purposes only.