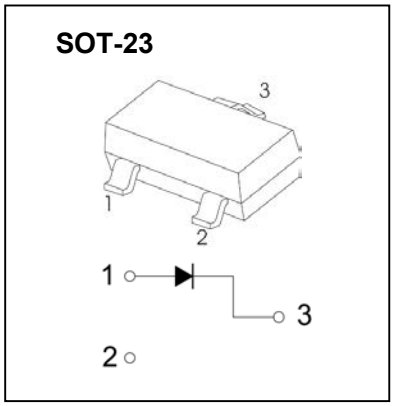
Plastic-Encapsulate Diodes

SCHOTTKY BARRIER DIODE



FEATURES

- Low Forward Voltage
- Fast Reverse Recovery Time
- High Forward Current

APPLICATIONS

- High Speed Switching

MARKING: H9

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

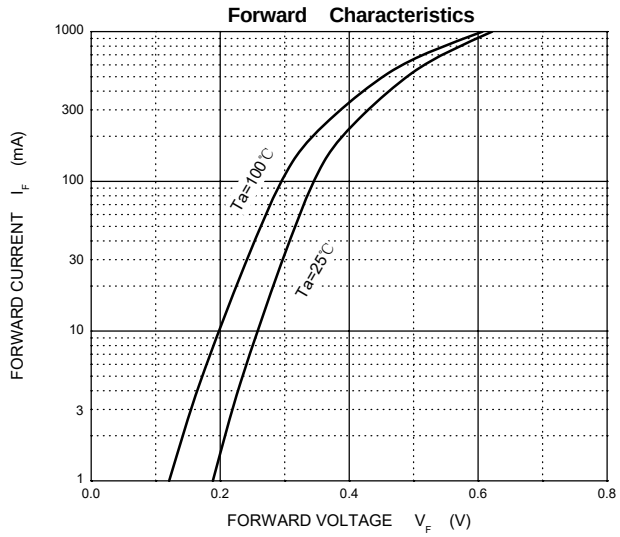
MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

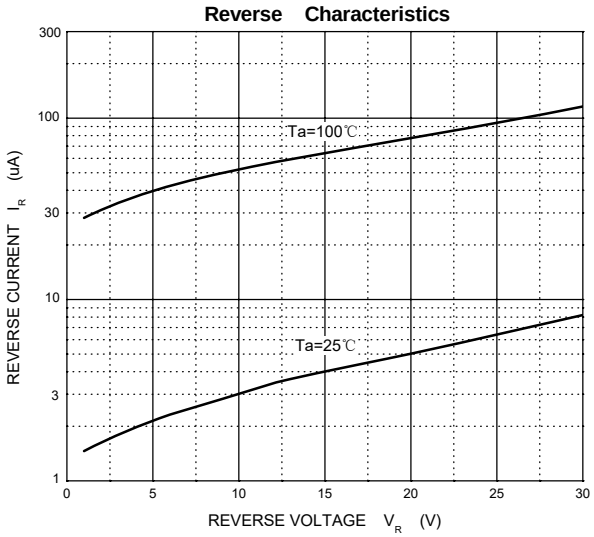
Symbol	Parameter	Value	Unit
V_R	DC Blocking Voltage	20	V
I_O	Forward Continuous Current	500	mA
I_{FM}	Peak Forward Current	1.5	A
I_{FSM}	Non-repetitive Peak Forward Surge Current@t=8.3ms	5	A
P_D	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	500	℃/W
T_j	Operating Junction Temperature Range	-40 ~ +125	℃
T_{stg}	Storage Temperature Range	-55 ~ +150	℃

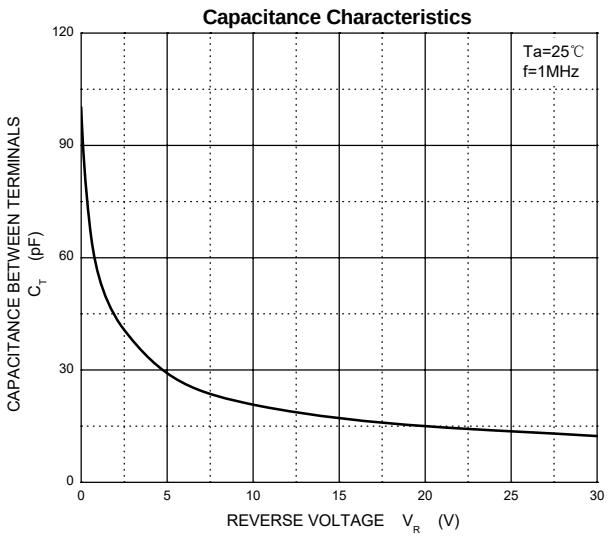
ELECTRICAL CHARACTERISTICS(T_a=25℃ unless otherwise specified)

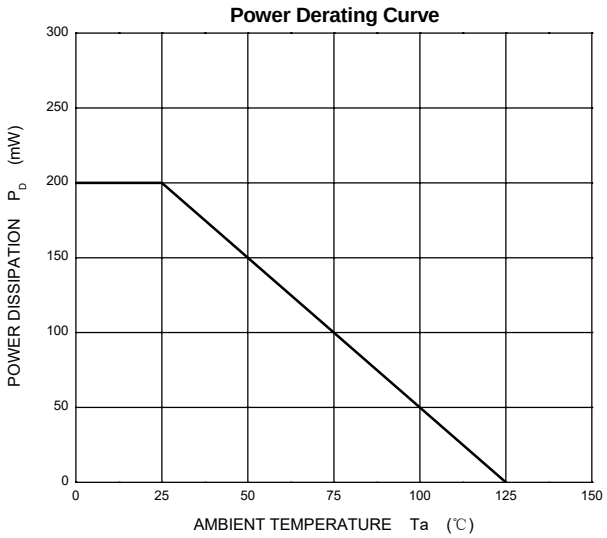
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	I_R=100μA	20			V
Reverse current	I_R	V_R=10V			20	μA
		V_R=20V			100	
Forward voltage	V_F	I_F=10mA			0.35	V
		I_F=100mA			0.43	
		I_F=500mA			0.55	
Total capacitance	C_{tot}	V_R=0V, f=1MHz		120		pF
Reverse recovery time	t_{rr}	I_F= I_R=50mA, V_R=6V		20		ns

Typical Characteristics



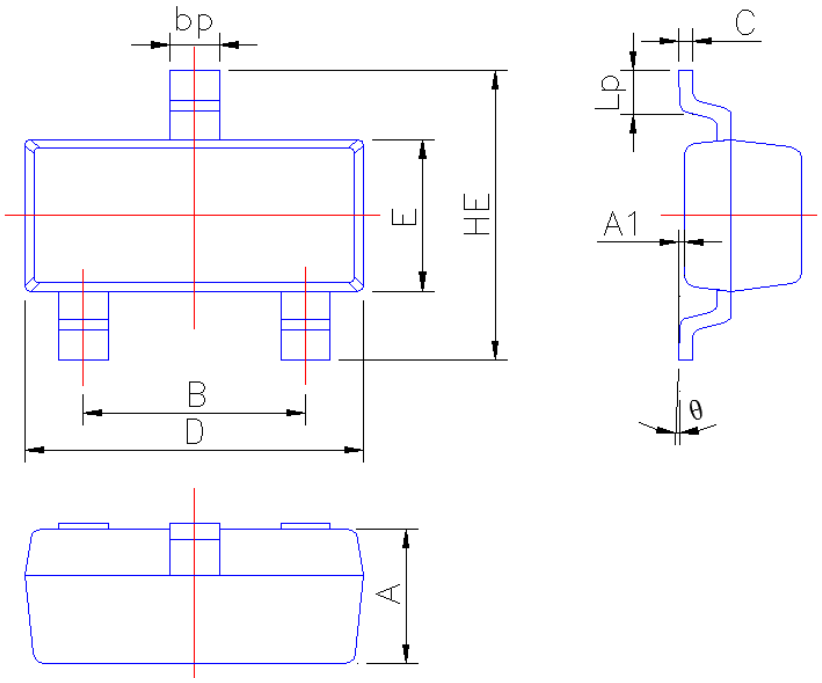






PACKAGE OUTLINE

Plastic surface mounted package; 3 leads **SOT-23**



Symbol	Dimension in Millimeters	
	Min	Max
A	0.90	1.10
A1	0.013	0.100
B	1.80	2.00
bp	0.35	0.50
C	0.09	0.150
D	2.80	3.00
E	1.20	1.40
HE	2.20	2.80
Lp	0.20	0.50
θ	0°	5°