

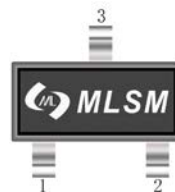
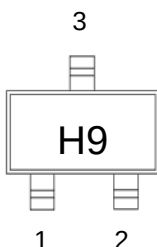
Features

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

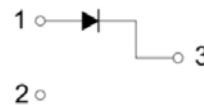
Applications

- High Speed Switching

Marking: H9



SOT-23 top view



Schematic diagram



Halogen-Free

Maximum Ratings ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_R	DC Blocking voltage	20	V
I_{FM}	Peak Forward Current	1.5	A
I_o	Forward Continuous Current	500	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	5	A
P_D	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	500	$^{\circ}\text{C/W}$
T_J	Operating Junction Temperature Range	$-40 \sim +125$	$^{\circ}\text{C}$
T_{STG}	Storage Temperature Range	$-55 \sim +150$	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$ unless otherwise specified)

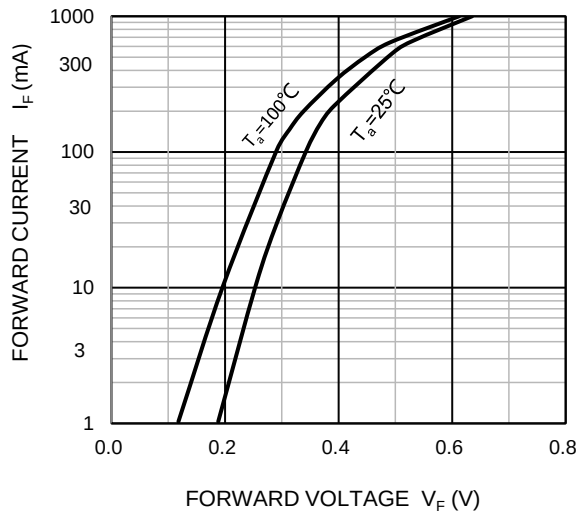
Symbol	Parameter	Condition	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse voltage	$I_R=100\mu\text{A}$	20	--	--	V
I_R	Reverse current	$V_R=10\text{V}$	--	--	20	μA
		$V_R=20\text{V}$	--	--	100	
V_F	Forward voltage	$I_F=10\text{mA}$	--	--	0.35	V
		$I_F=100\text{mA}$	--	--	0.43	V
		$I_F=500\text{mA}$	--	--	0.55	V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

Ordering Information (Example)

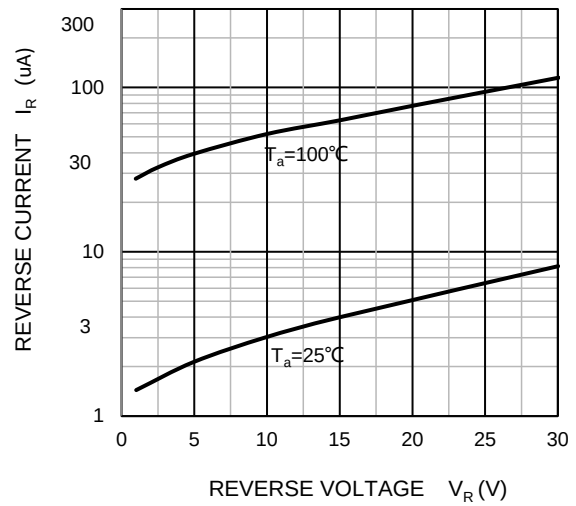
Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
1SS344	SOT-23	H9	3,000	45,000	180,000	7"reel

Typical Operating Characteristics

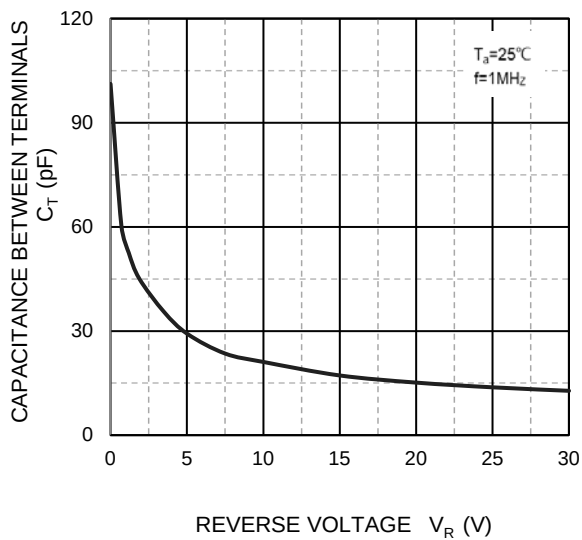
Forward Characteristics



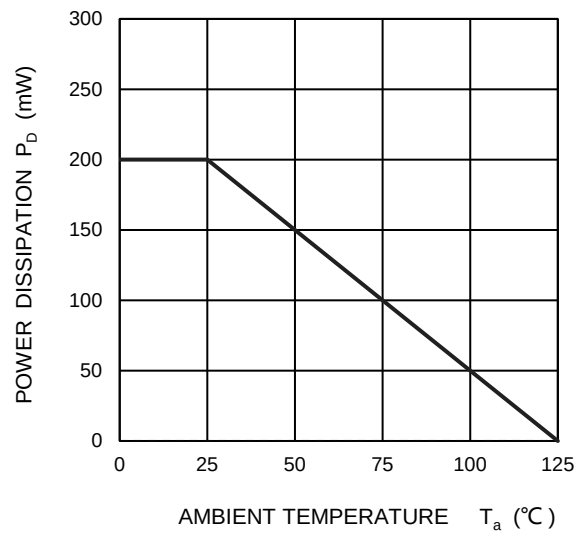
Reverse Characteristics



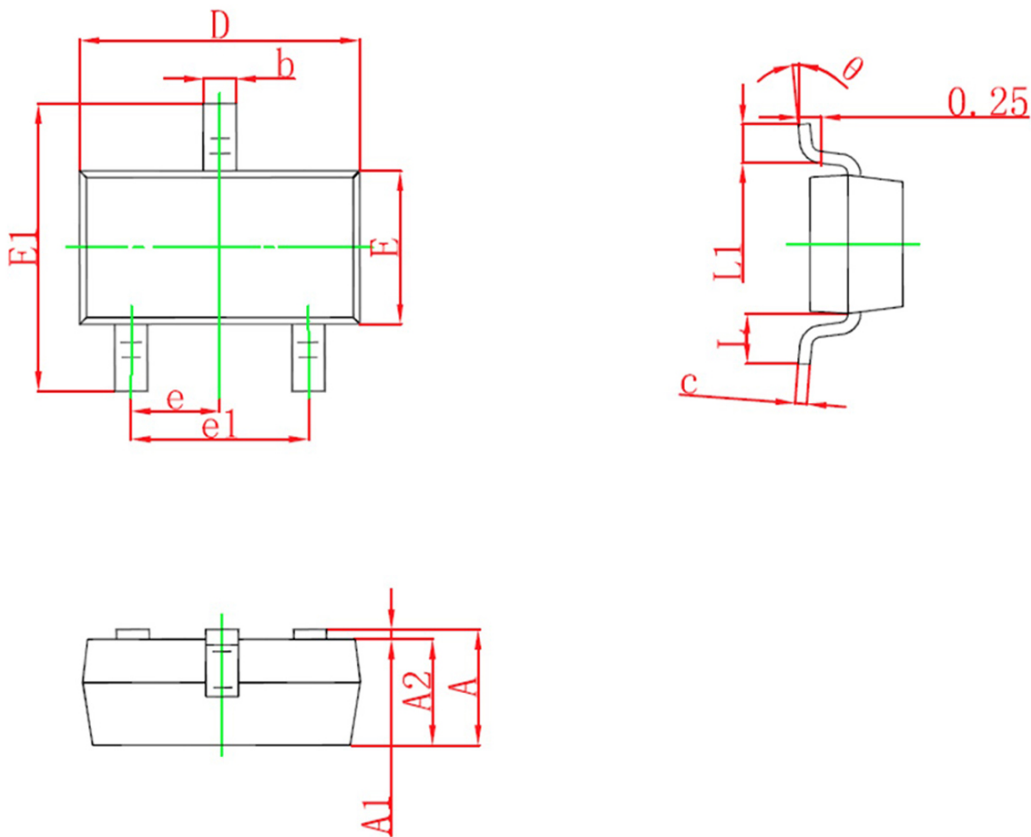
Capacitance Characteristics



Power Derating Curve



SOT-23 Package information



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E1	2.250	2.550	0.088	0.100
E	1.200	1.400	0.047	0.055
e	0.950TYP		0.037TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°