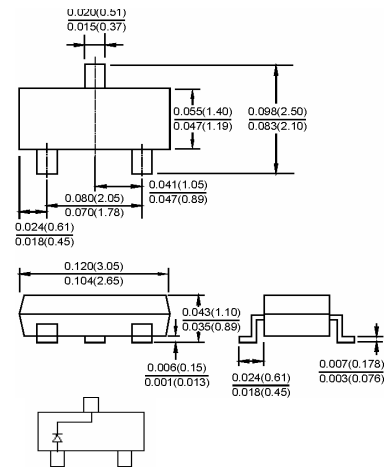


SOT-23



Dimensions in inches and (millimeters)

Features

- Fast reverse recovery time: $t_{rr}=20\text{ns}(\text{typ})$.
- Low forward voltage: $V_F=0.50\text{V}(\text{typ})$.
- High average forward current: $I_O=0.5\text{A}(\text{max.})$

Applications

- Ultra high speed switching application.

Ordering Information

Type No.	Marking	Package Code
1SS344	H9	SOT-23

MAXIMUM RATING @ $T_a=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Limits	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	25	V
DC Reverse Voltage	V_R	20	V
Forward Current(max)	I_{FM}	1500	mA
Average forward Output current	I_o	500	mA
Peak forward surge current @=1.0ms	I_{FSM}	5	A
Power Dissipation	P_d	200	mW
Operating Junction Temperature Range	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +125	$^\circ\text{C}$

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

Characteristic	Symbol	Min.	Typ.	MAX.	UNIT	Test Condition
Forward Voltage	V_F		0.30 0.38 0.50	0.55	V	$I_F=10\text{mA}$ $I_F=100\text{mA}$ $I_F=500\text{mA}$
Reverse Leakage Current	I_R			20 100	μA	$V_R=10\text{V}$ $V_R=20\text{V}$
Diode Capacitance	C_D		120		pF	$V_R=0\text{V}, f=1\text{MHz}$
Reverse Recovery Time	t_{rr}		20		ns	$I_F=I_R=10\text{mA}, I_{rr}=0.1*I_R$

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

