

# 1SS344 SCHOTTKY BARRIER DIODE

## FEATURES

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

## APPLICATIONS

- High Speed Switching



device,if none,

## MAXIMUM RATINGS ( $T_a=25^{\circ}\text{C}$ 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	$^{\circ}\text{C/W}$
$T_j$	Operating Junction Temperature Range	-40 ~ +125	$^{\circ}\text{C}$
$T_{stg}$	Storage Temperature Range	-55 ~ +150	$^{\circ}\text{C}$

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

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

