

## ULTRA HIGH SPEED SWITCHING APPLICATION

## 1SS181

## ■ Features

- Small Package
- Low forward voltage : $V_{F(3)} = 0.92 \text{ V(Typ.)}$
- Fast Reverse Recovery Time : $t_{rr} = 1.6 \text{ ns(Typ.)}$
- Small Total Capacitance : $C_T = 2.2\text{pF(Typ.)}$

■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Rating	Unit
Peak Reverse Voltage	$V_{RM}$	85	V
DC Reverse Voltage	$V_R$	80	V
Peak Reverse Current	$I_{FM}$	300*	mA
Average Rectified Current	$I_O$	100*	mA
DC Forward Current	$I_F$	2*	A
Junction Temperature	$T_j$	125	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 to+ 125	$^\circ\text{C}$

\* Unit Rating.Total Rating = Unit Rating  $\times$  1.5.

■ Electrical Characteristics  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Continuous reverse voltage	$V_F$	$I_F = 1.0 \text{ mA}$		0.61		V
		$I_F = 10 \text{ mA}$		0.74		
		$I_F = 100 \text{ mA}$		0.92	1.2	
Reverse current	$I_R$	$V_R = 30 \text{ V}$			0.1	$\mu\text{A}$
		$V_R = 80 \text{ V}$			0.5	
Total capacitance	$C_T$	$V_R = 0, f = 1.0 \text{ MHz}$		2.2	4.0	pF
Reverse recovery time	$t_{rr}$	$I_F = 10 \text{ mA}$		1.6	4.0	ns

## ■ Marking

Marking	A3
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