



## SOT-23 Plastic-Encapsulate Diodes

**1SS1 87** Switching DIODES**SOT-23**

1. CATHODE
2. N.C.
3. ANODE

**FEATURES**

- Low forward voltage :  $V_{F(3)}=0.92V(\text{typ.})$
- Fast reverse recovery time :  $t_{rr}=1.6ns(\text{typ.})$

**Maximum Ratings @ $T_A=25^\circ\text{C}$** 

Parameter Symbol		Limits	Unit
Non-Repetitive Peak reverse voltage	$V_{RM}$	85	V
DC Blocking Voltage	$V_R$	80	V
Forward Continuous Current	$I_{FM}$	300	mA
Average Rectified Output Current	$I_O$	100	mA
Power Dissipation	$P_D$	150	mW
Junction temperature	$T_J$	125	$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55-125	$^\circ\text{C}$

**Electrical Characteristics @ $T_A=25^\circ\text{C}$** 

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)R}$	80			V	$I_R=100\mu\text{A}$
Forward voltage	$V_{F1}$		0.61		V	$I_F=1\text{mA}$
	$V_{F2}$		0.74		V	$I_F=10\text{mA}$
	$V_{F3}$		0.92	1.2	V	$I_F=100\text{mA}$
Reverse current	$I_{R1}$			0.1	$\mu\text{A}$	$V_R=30\text{V}$
	$I_{R2}$			0.5	$\mu\text{A}$	$V_R=80\text{V}$
Capacitance between terminals	$C_T$		2.2	4.0	pF	$V_R=0, f=1\text{MHz}$
Reverse recovery time	$t_{rr}$		1.6	4.0	ns	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \times I_R$

# Typical Characteristics

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