

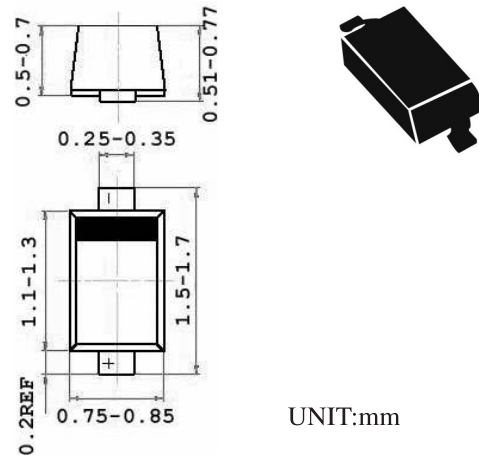
**SWITCHING DIODE**

VOLTAGE RANGE: 45 VOLTS

CURRENT: 100mA

**FEATURES**

- Small Package
- Low Forward Voltage:  $V_{F3} = 0.54$  (typ)
- Low Reverse Current:  $I_R = 5\mu A$  (typ)

**MARKING: S3**
**SOD-523**

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Parameters	Symbols	Limits	UNITS
Peak Reverse Voltage	$V_{RM}$	45	V
DC Reverse Voltage	$V_R$	40	V
Peak Forward Current	$I_{FM}$	300	mA
Average Forward Current	$I_O$	100	mA
Surge Current (10ms)	$I_{surge}$	1000	mA
Power Dissipation	$P_D$	150	mW
Junction Temperature	$T_J$	125	°C
Storage Temperature	$T_{STG}$	-55~+125	°C
Operating Temperature Range	$T_{OPR}$	-40~+100	°C

**ELECTRICAL RATINGS**

Parameters	Symbols	Test conditions	Min.	Typ.	Max.	UNITS
Forward Voltage	$V_{F1}$	$I_F=1mA$		0.28		V
	$V_{F2}$	$I_F=10mA$		0.36		V
	$V_{F3}$	$I_F=50mA$		0.54	0.60	V
Reverse Current	$I_R$	$V_R=10V$			5	$\mu A$
Total Capacitance	$C_T$	$V_R=0V, f=1MHz$		18	25	pF

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