

High Speed SWITCHING Diodes
FEATURES

- Small package
- Low forward voltage : $V_{F3} = 0.54$ (typ)
- Low reverse current : $I_R = 5\mu A$ (typ)

SOD-523

MARKING: S3
Maximum Ratings and Electrical Characteristics, Single Diode @ $T_A=25^\circ C$

Parameter	Symbol	Limits		Unit
Peak reverse voltage	V_{RM}	45		V
DC reverse voltage	V_R	40		V
Maximum (peak) forward current	I_{FM}	300		mA
Average forward current	I_o	100		mA
Surge current (10ms)	I_{FSM}	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 @ $T_A=25^\circ C$

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_{F1}		0.28		V	$I_F=1mA$
	V_{F2}		0.36		V	$I_F=10mA$
	V_{F3}		0.54	0.60	V	$I_F=50mA$
Reverse current	I_R			5	μA	$V_R=10V$
Total capacitance	C_T		18	25	pF	$V_R=0, f=1MHz$

Typical Characteristics

