

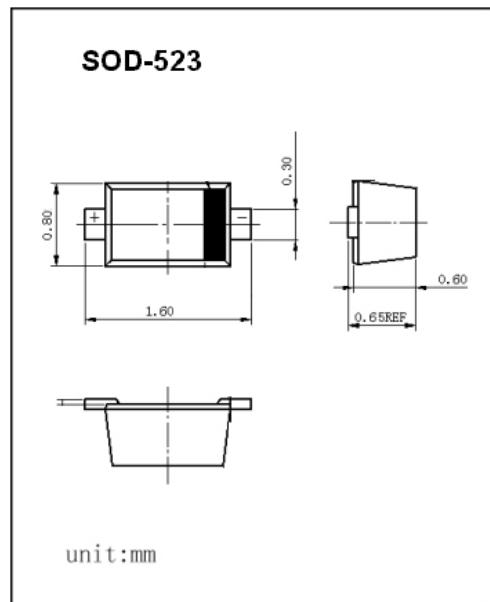


SOD-523 Plastic-Encapsulate Diodes

1SS400 High Speed SWITCHING Diodes

FEATURES

- Small surface mounting type
- High Speed
- High reliability with high surge current handing capability



Maximum Ratings and Electrical Characteristics, Single Diode @ $T_A=25^\circ\text{C}$

Parameter	Symbol	Limits		Unit
Peak reverse voltage	V_{RM}	90		V
DC reverse voltage	V_R	80		V
Peak forward current	I_{FM}	225		mA
Mean rectifying current	I_o	100		mA
Surge current (1s)	I_{surge}	500		mA
Junction temperature	T_j	125		°C
Storage temperature	T_{stg}	-55~+125		°C

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F			1.2	V	$I_F=100\text{mA}$
Reverse current	I_R			0.1	μA	$V_R=80\text{V}$
Capacitance between terminals	C_T			3.0	pF	$V_R=0.5\text{V}, f=1\text{MHz}$
Reverse recovery time	t_{rr}			4	ns	$V_R=6\text{V}, I_F=10\text{mA}, R_L=100\Omega$

Typical Characteristics

1SS400

● Electrical characteristic curves ($T_a = 25^\circ\text{C}$)

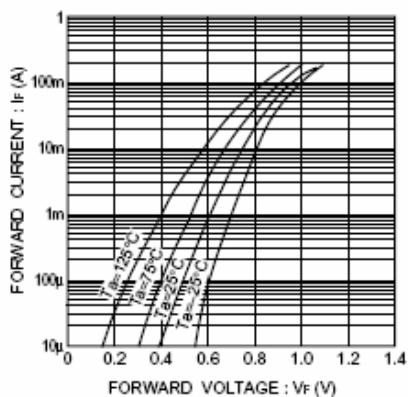


Fig.1 Forward characteristics

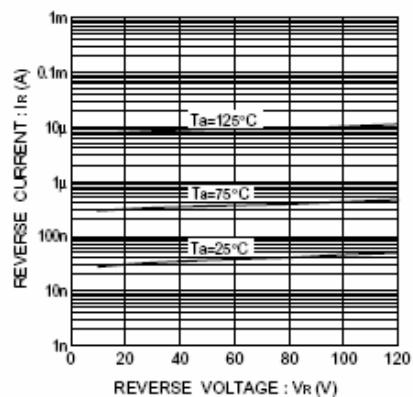


Fig.2 Reverse characteristics

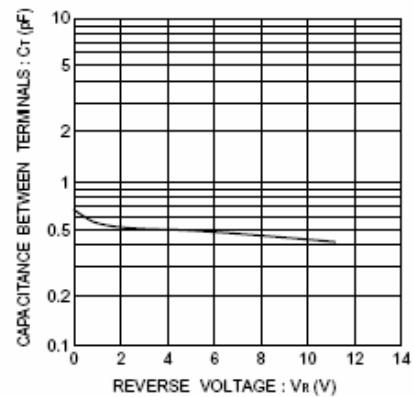


Fig.3 Capacitance between terminals

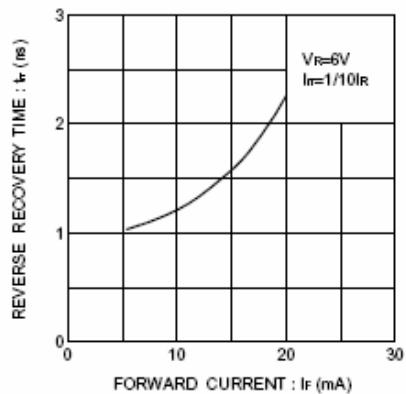


Fig.4 Reverse recovery time characteristics

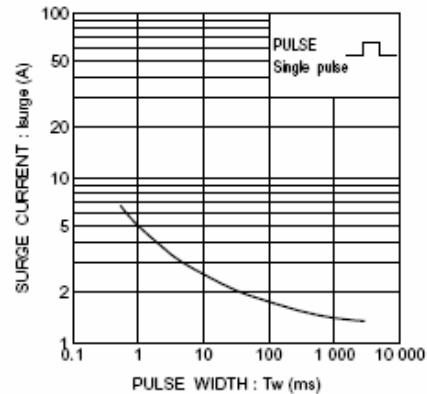


Fig.5 Surge current characteristics

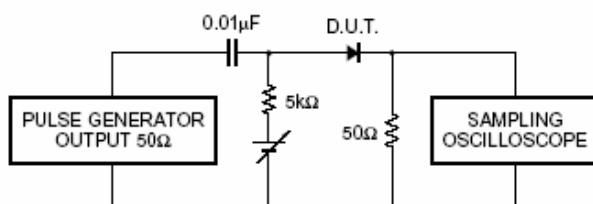


Fig.6 Reverse recovery time (t_{rr}) measurement circuit