

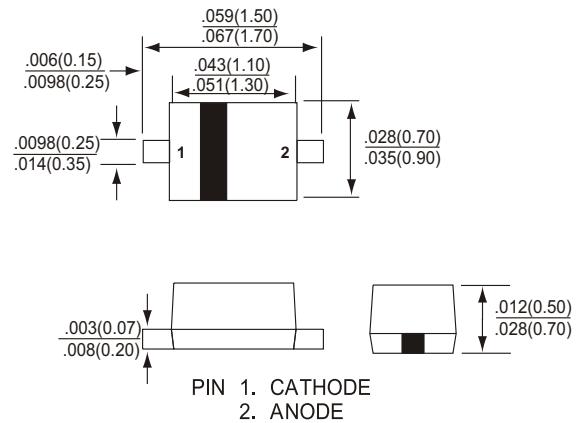
1SS400

SURFACE MOUNT ZENER DIODES

SWITCHING DIODES 100m AMPERES 90 VOLTS



SOD-523



FEATURES

- Extremely High Switching Speed
- Low Reverse Leakage Current .
- High Reliability.
- Small Outline Surface Mount SOD-523 Package

APPLICATIONS

High Speed Switching

MAXIMUM RATING (T_A=25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	VALUE	UNITS
Peak Reverse Voltage	V _{RM}	90	Volts
DC Reverse Voltage	V _R	80	Volts
Average Rectified Forward Current	I _{F(AV)}	100	mA
Peak Forward Surge Current at t=1S	I _{FSM}	500	mA
Operating Junction Temperature Range	T _J	125	°C
Storage Temperature Range	T _{stg}	-40 to +125	°C

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	Min	Max	UNITS
Reverse Breakdown Voltage (I _R = 100 μA)	V _{(BR)R}	80		Volts
Forward Voltage I _F = 100mA	V _F		1.20	Volts
Reverse Leakage V _R = 80V	I _R		0.1	μA dc
Capacitance Between Terminals V _R = 0.5V, f=MHz	C _J		3.0	pF
Reverse Voltage Time V _R = 6V, I _F = 10mA, R _L = 100 Ω	T _{RR}		4.0	nS

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

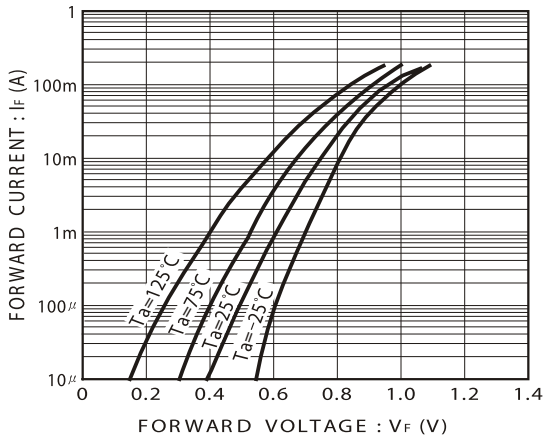


Fig.1 Forward characteristics

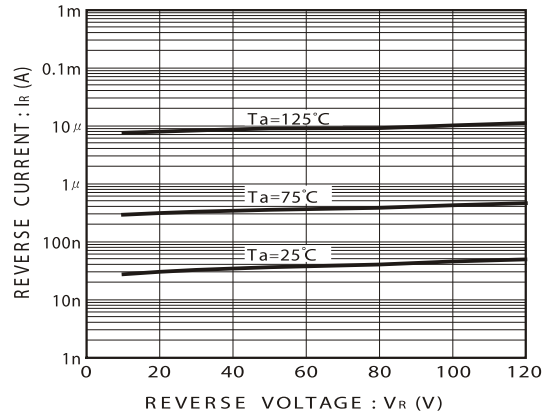


Fig.2 Reverse characteristics

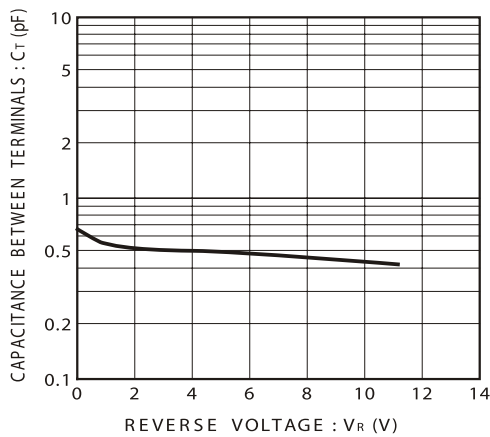


Fig.3 Capacitance between terminals

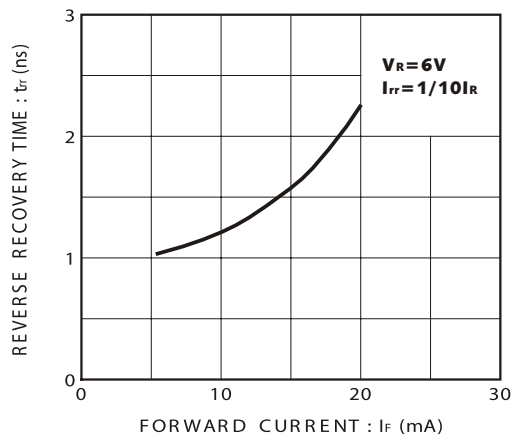


Fig.4 Reverse recovery time characteristics

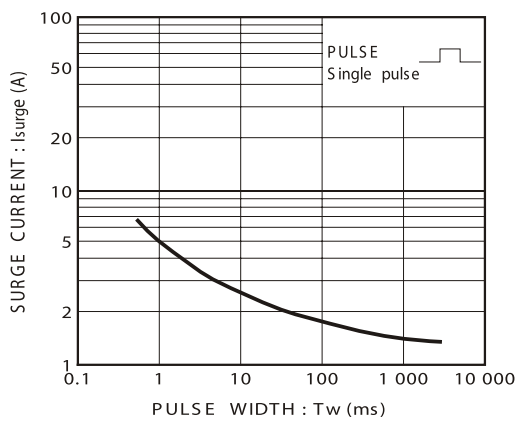


Fig.5 Surge current characteristics

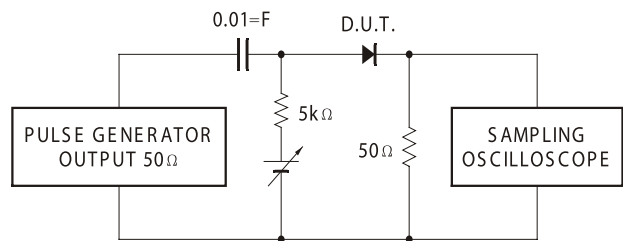


Fig.6 Reverse recovery time (t_{rr}) measurement circuit