

# Surface Mount High Speed Switching Diode

**COMCHIP**  
SMD DIODE SPECIALIST

## 1SS400-G (RoHS Device)

**Voltage: 90 Volts**

**Current: 225 mA**



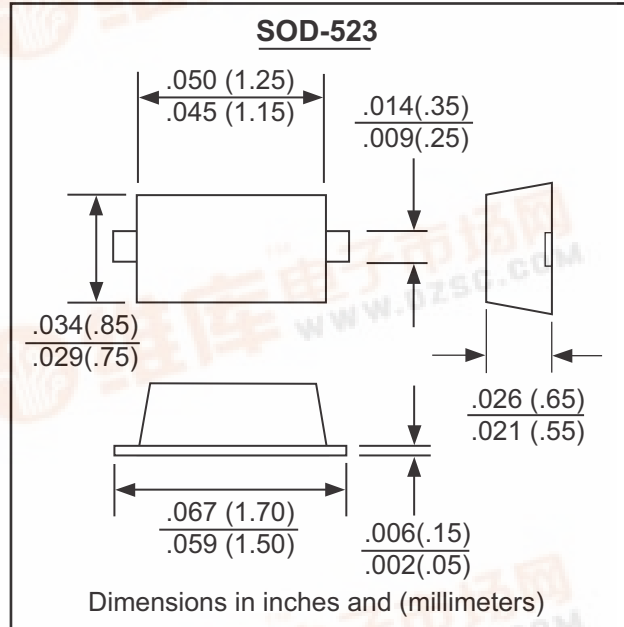
This device is an extremely fast switching diodes housed in the ultra-small SOD-523 package. Ideal for applications like mobile phones, hand-held computers and high speed switching applications.

### Features:

- Small surface mounting type
- High current capability
- Low reverse leakage current
- High surge current capability

### Applications:

- Mobile phones and accessories
- Hand-held computers
- High Speed Switching Applications



### Maximum Ratings and Electrical Characteristics, Single Diode @ T<sub>A</sub>=25°C

Parameter	Symbol	Limits	Unit
Peak reverse voltage	V <sub>RM</sub>	90	V
DC reverse voltage	V <sub>R</sub>	80	V
Peak forward current	I <sub>FM</sub>	225	mA
Mean rectifying current	I <sub>O</sub>	100	mA
Surge current (1s)	I <sub>SURGE</sub>	500	mA
Junctions temperature	T <sub>J</sub>	125	°C
Storage temperature	T <sub>stg</sub>	-55~+125	°C

### Electrical Ratings @ T<sub>A</sub>=25°C

Parameter	Symbol	Max.	Unit	Conditions
Forward voltage	V <sub>F</sub>	1.2	V	I <sub>F</sub> =100mA
Reverse current	I <sub>R</sub>	0.1	μA	V <sub>R</sub> =80V
Capacitance between terminals	C <sub>T</sub>	3.0	pF	C <sub>T</sub> =0.5V, f=1MHZ
Reverse recovery time	T <sub>rr</sub>	4	ns	V <sub>R</sub> =6V, I <sub>F</sub> =100mA, R <sub>L</sub> =100 OHM



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

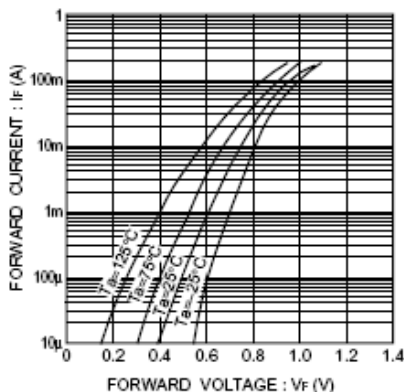


Fig.1 Forward characteristics

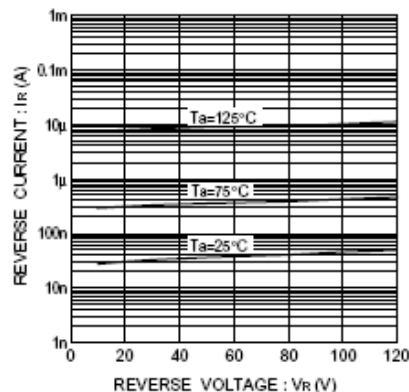


Fig.2 Reverse characteristics

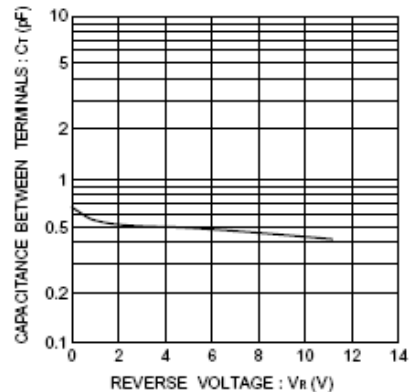


Fig.3 Capacitance between terminals

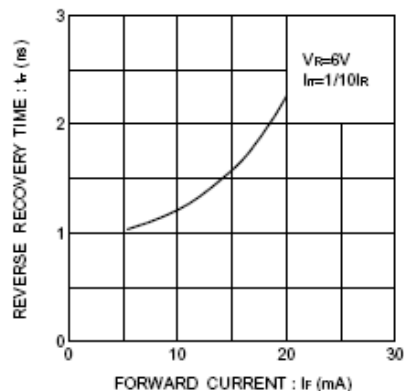


Fig.4 Reverse recovery time characteristics

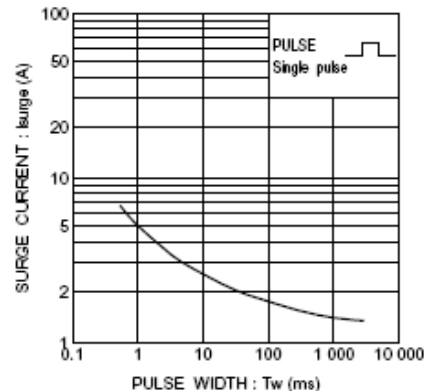


Fig.5 Surge current characteristics

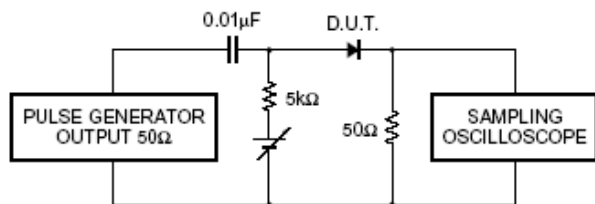


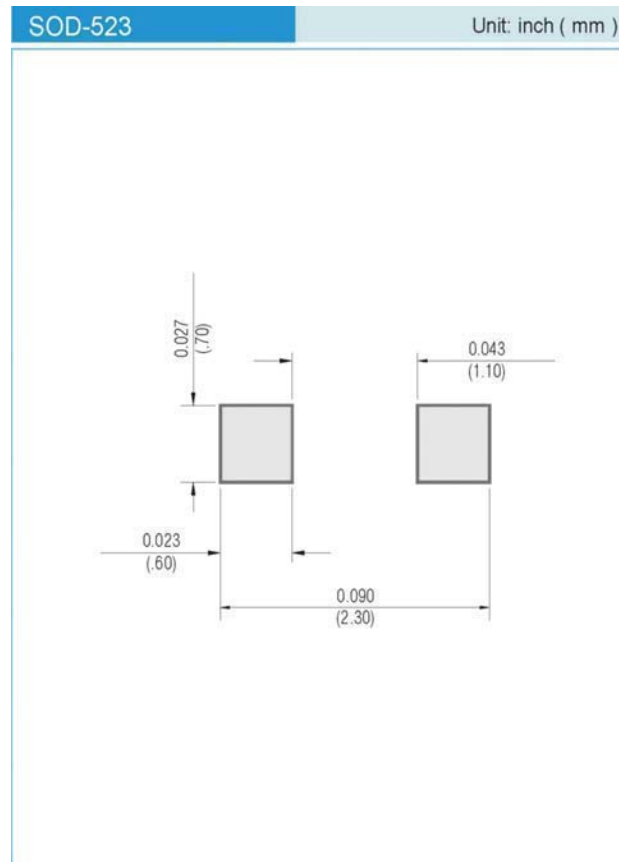
Fig.6 Reverse recovery time ( $t_r$ ) measurement circuit

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### PAD DIMENSIONS



### ORDERING INFORMATION

1SS400-G T/R7 - 7" reel, 3K units per reel

1SS400-G T/R13 - 13" reel, 10K units per reel