

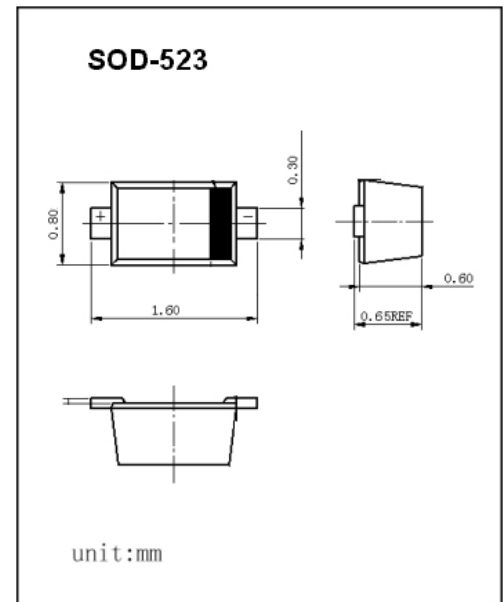
## SOD-523 Plastic-Encapsulated Diodes

### 1SS422 High Speed SWITCHING Diodes

#### FEATURES

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

**MARKING: 6**



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

Parameter	Symbol	Limits	Unit
Peak reverse voltage	V <sub>RM</sub>	100	V
DC reverse voltage	V <sub>R</sub>	85	V
Peak forward current	I <sub>FM</sub>	500	mA
Mean rectifying current	I <sub>O</sub>	150	mA
Junction 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	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V <sub>F</sub>			1.2	V	I <sub>F</sub> =150mA
Reverse current	I <sub>R</sub>			0.1	μA	V <sub>R</sub> =85V
Capacitance between terminals	C <sub>T</sub>			3.0	pF	V <sub>R</sub> =0.5V, f=1MHZ
Reverse recovery time	t <sub>rr</sub>			4	ns	V <sub>R</sub> =6V, I <sub>F</sub> =10mA, R <sub>L</sub> =100Ω

# Typical Characteristics

# 1SS422

FIG. 1 - SURGE CURRENT CHARACTERISTICS

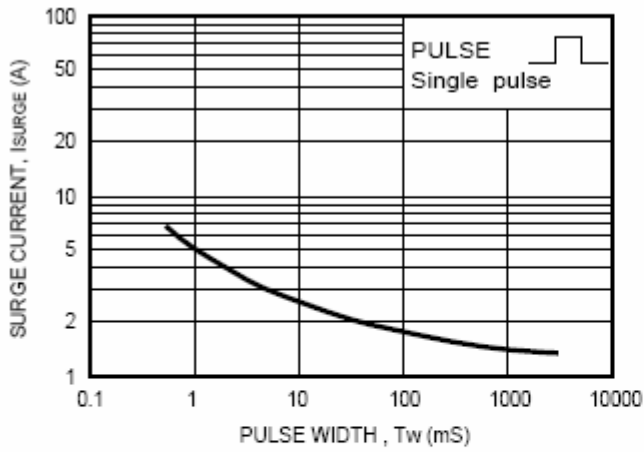


FIG. 2 - FORWARD CHARACTERISTICS

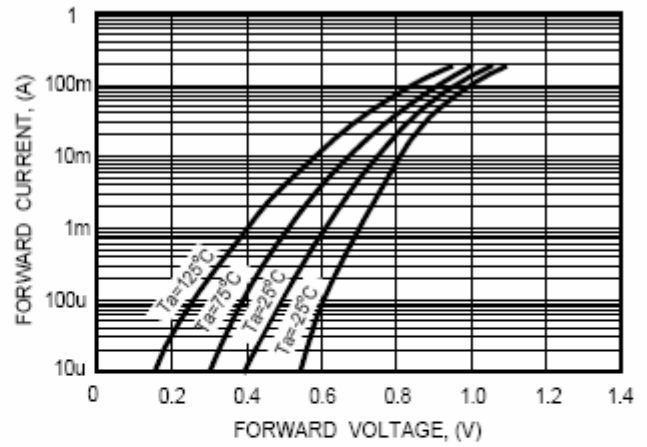


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

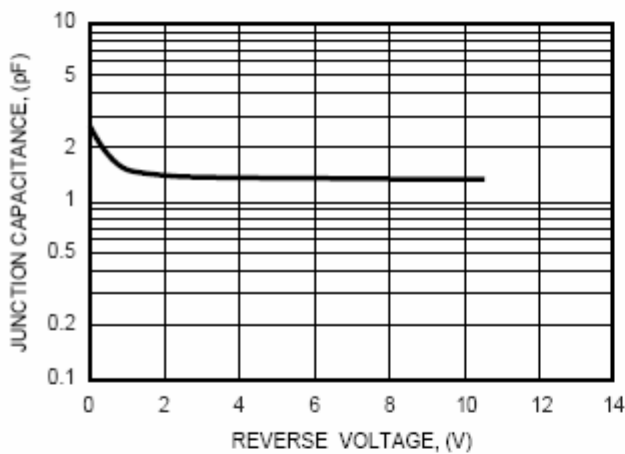


FIG. 4 - REVERSE CHARACTERISTICS

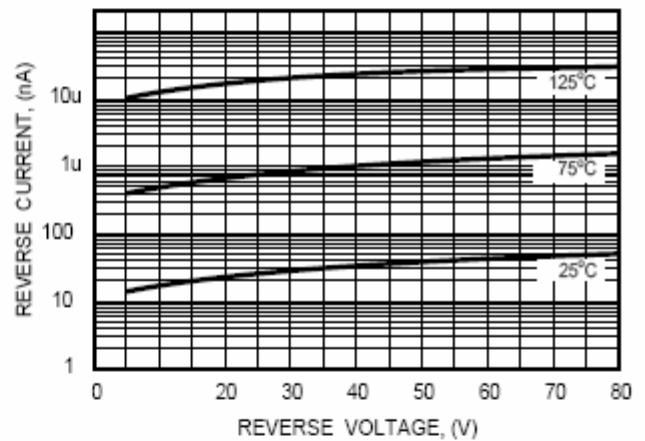


FIG. 5 - REVERSE RECOVERY TIME

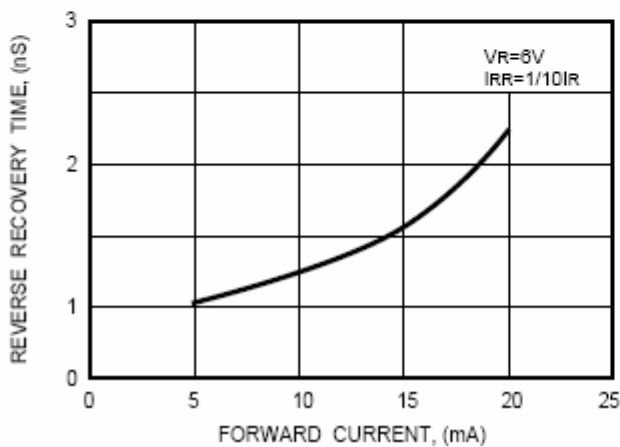


FIG. 6 - REVERSE RECOVERY TIME MEASUREMENT CIRCUIT

