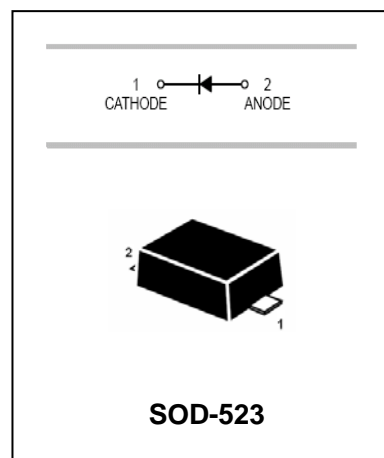


High speed Switching Diode

1SS422

FEATURES

- High reliability with high surge current handing capability.
- Small package.
- High speed.



APPLICATIONS

- High speed switching.

ORDERING INFORMATION

Type No.	Marking	Package Code
1SS422	6	SOD-523

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	Limits	Unit
Peak reverse voltage	V_{RM}	100	V
RMS Reverse voltage	V_{RMS}	70	V
DC Reverse voltage	V_R	85	V
Peak surge forward current @t=1s	I_{FSM}	500	mA
Average forward rectified current	I_O	150	mA
Total power dissipation	P_{tot}	150	mW
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-55 to +125	°C

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F			1.2	V	$I_F=150mA$
Reverse current	I_R			0.1	μA	$V_R=85V$
Diode capacitance	C_d			3.0	pF	$V_R=0.5V, f=1MHz$
Reverse recovery time	t_{rr}			4	ns	$V_R=6V, I_F=10mA, R_L=100\Omega$

High speed Switching Diode

1SS422

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

FIG. 1 - SURGE CURRENT CHARACTERISTICS

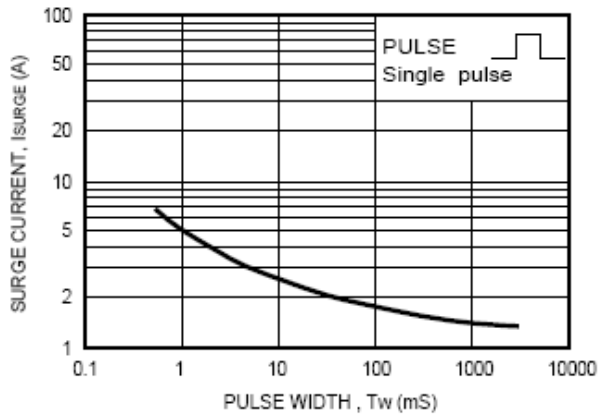


FIG. 2 - FORWARD CHARACTERISTICS

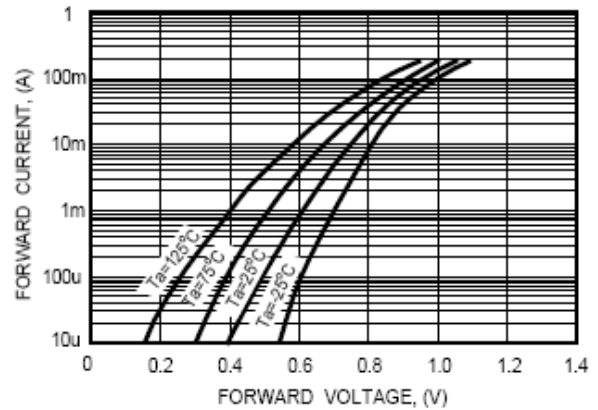


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

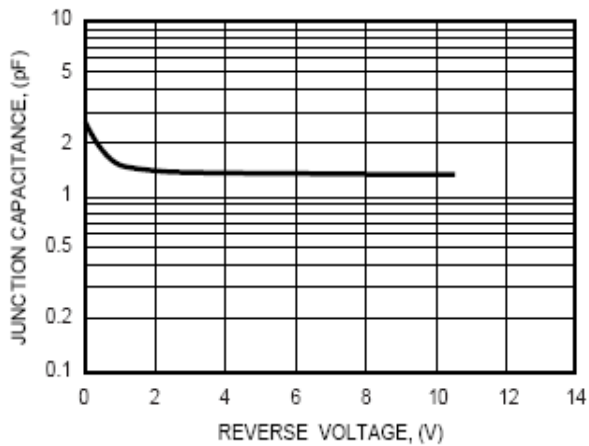


FIG. 4 - REVERSE CHARACTERISTICS

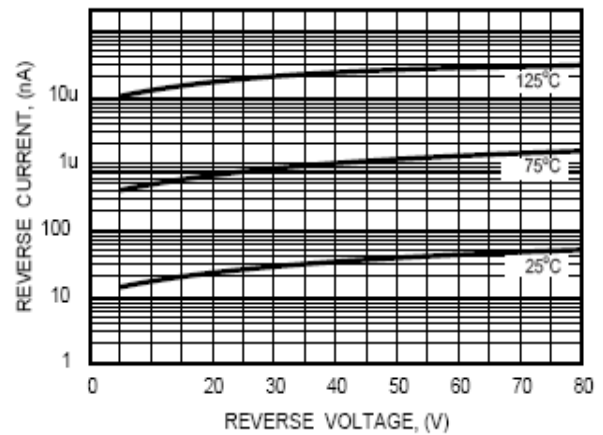
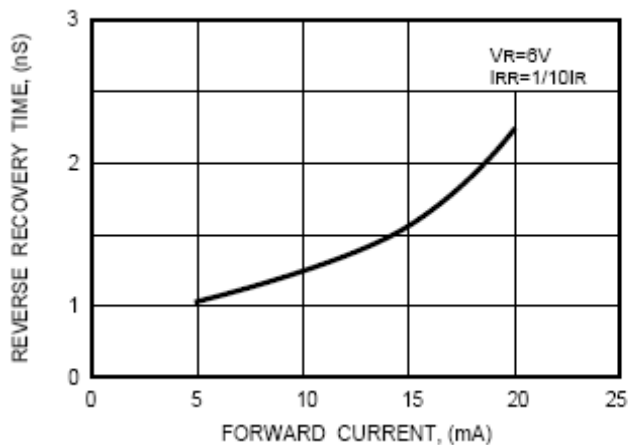


FIG. 5 - REVERSE RECOVERY TIME



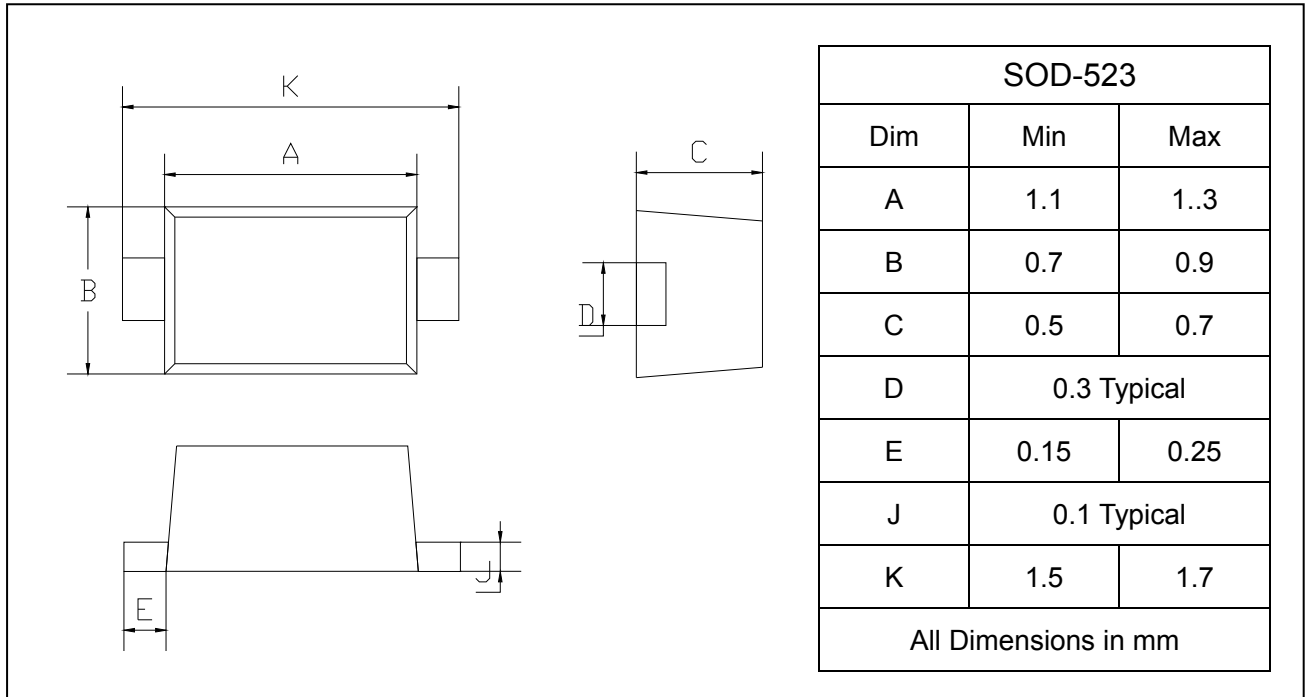
High speed Switching Diode

1SS422

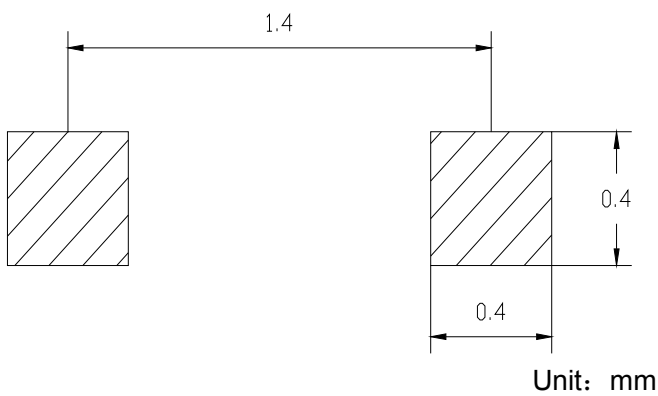
PACKAGE OUTLINE

Plastic surface mounted package

SOD-523



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
1SS422	SOD-523	3000/Tape&Reel