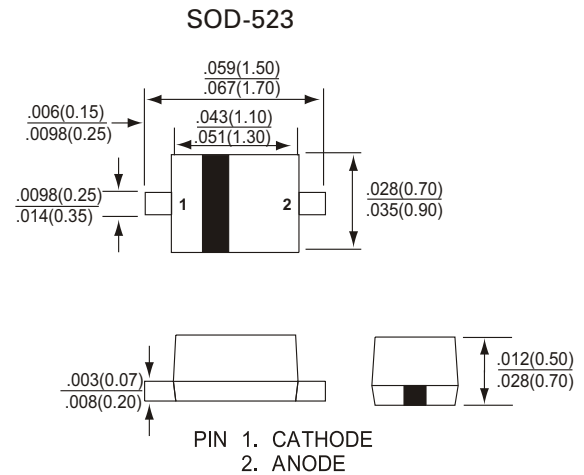


1SS422

High Speed SWITCHING Diodes



FEATURES

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

APPLICATIONS

High Speed Switching

MAXIMUM RATING ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Limits	Unit
Peak reverse voltage	V_{RM}	100	V
DC reverse voltage	V_R	85	V
Peak forward current	I_{FM}	500	mA
Mean rectifying current	I_O	150	mA
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55~+125	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F			1.2	V	$I_F=150\text{mA}$
Reverse current	I_R			0.1	μA	$V_R=85\text{V}$
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	$V_R=6\text{V}, I_F=10\text{mA}, R_L=100\Omega$

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FIG. 1 - SURGE CURRENT CHARACTERISTICS

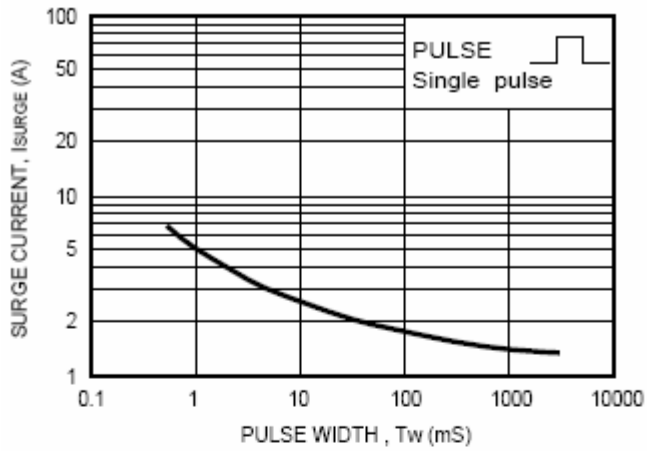


FIG. 2 - FORWARD CHARACTERISTICS

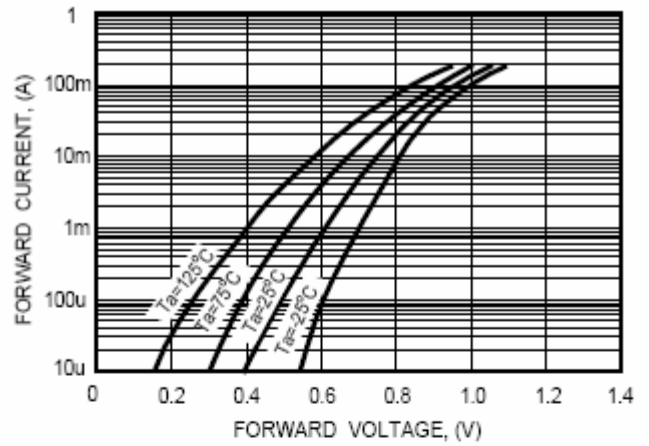


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

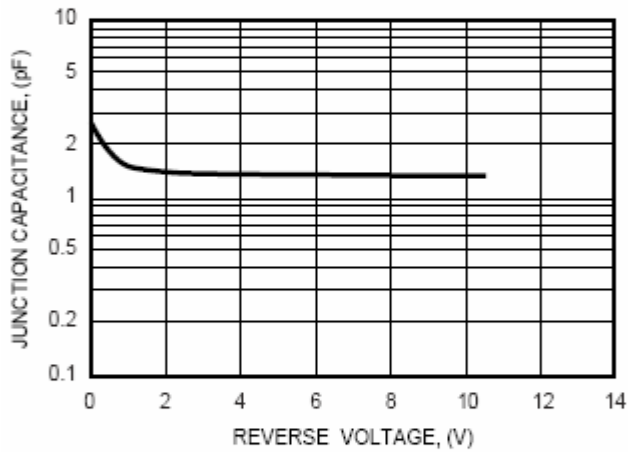


FIG. 4 - REVERSE CHARACTERISTICS

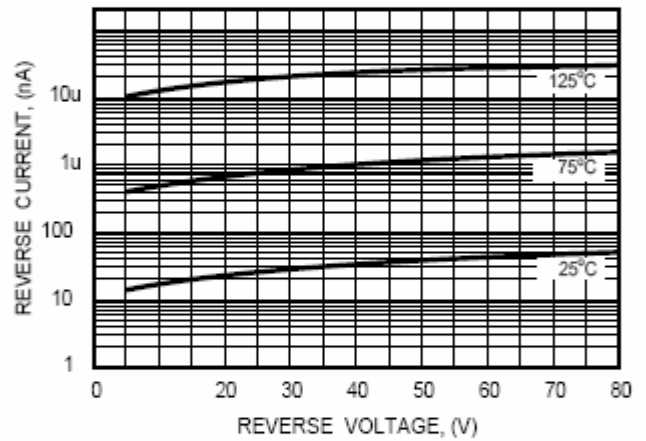


FIG. 5 - REVERSE RECOVERY TIME

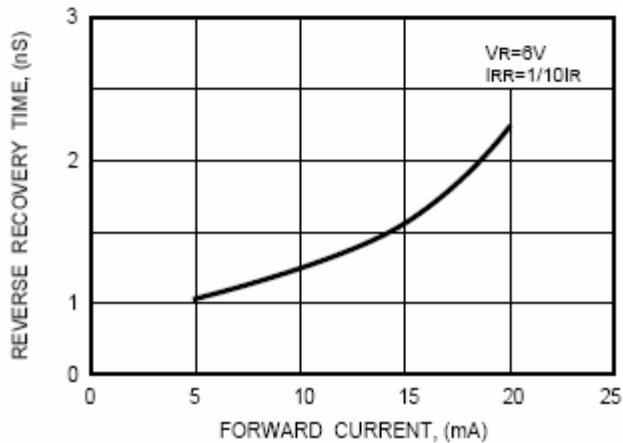
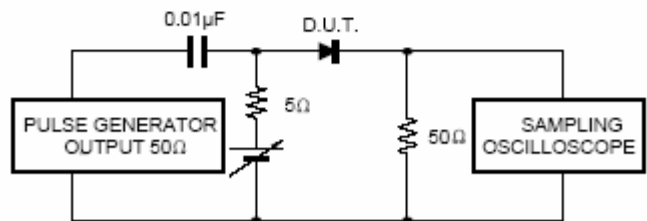


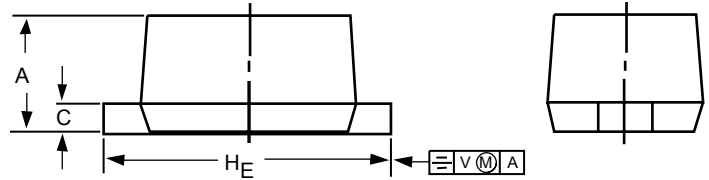
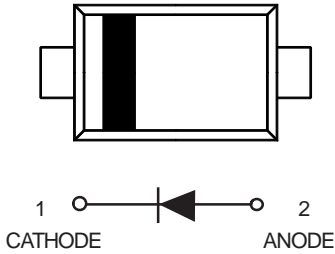
FIG. 6 - REVERSE RECOVERY TIME MEASUREMENT CIRCUIT



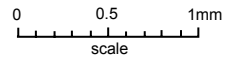
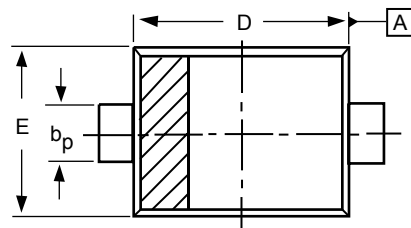
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High Speed SWITCHING Diodes

SC-79/SOD-523



SOD-523



DIMENSIONS (mm are the original dimensions)

UNIT	A	b _p	c	D	E	H _E	V
mm	0.7	0.35	0.2	1.3	0.9	1.7	0.15
	0.5	0.25	0.1	1.1	0.7	1.5	

Note

1. The marking bar indicates the cathode.

OUTLINE VERSION	REFERENCES			EUROPEAN PROJECTION	ISSUE DATE
	IEC	JEDEC	EIAJ		
SOD523			SC-79		98-11-25