

1SS400

SILICON EPITAXIAL PLANAR SWITCHING DIODE

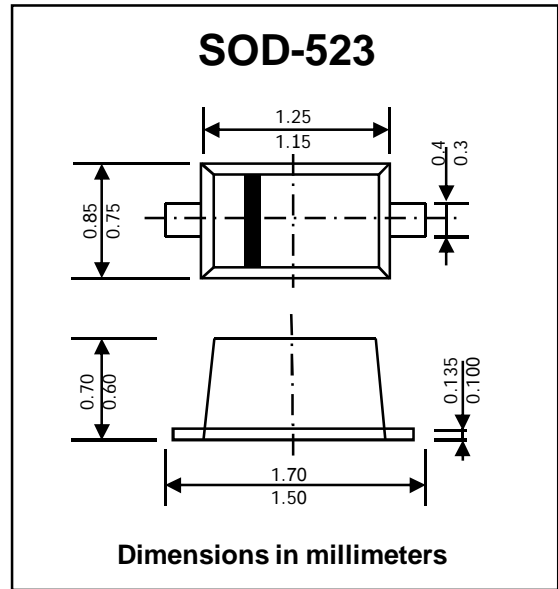
for high speed switching application

FEATURES :

- * Extremely small surface mounting type
- * High reliability
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : SOD-523 plastic Case
- * Marking Code: "A"



Absolute Maximum Ratings (Ta = 25 °C)

Parameter	Symbol	Value	Unit
Maximum Peak Reverse Voltage	V_{RM}	90	V
Maximum Reverse Voltage	V_R	80	V
Maximum Average Rectified Forward Current	$I_{F(AV)}$	100	mA
Maximum Peak Forward Current	I_{FM}	225	mA
Non-repetitive Peak Forward Surge Current (at t = 1 s)	I_{FSM}	500	mA
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{STG}	-55 to + 150	°C

Electrical Characteristics (Ta = 25 °C)

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 100$ mA	V_F	1.2	V
Reverse Current at $V_R = 80$ V	I_R	0.1	μ A
Total Capacitance at $V_R = 0.5$ V, f = 1 MHz	C_T	3.0	pF
Reverse Recovery Time at $V_R = 6$ V $I_F = 10$ mA, $R_L = 100$ Ω	trr	4.0	ns

RATING AND CHARACTERISTIC CURVES (1SS400)

FIG.1 - Forward characteristics

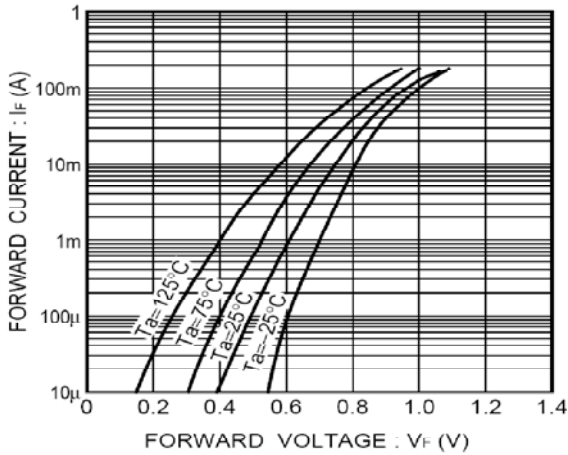


FIG.2 - Reverse characteristics

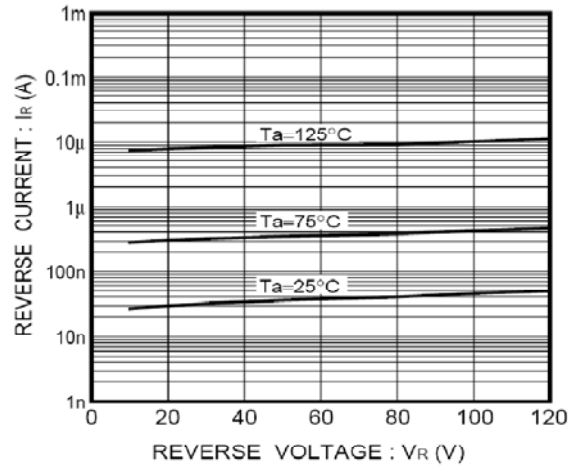


FIG.3 - Capacitance between terminals

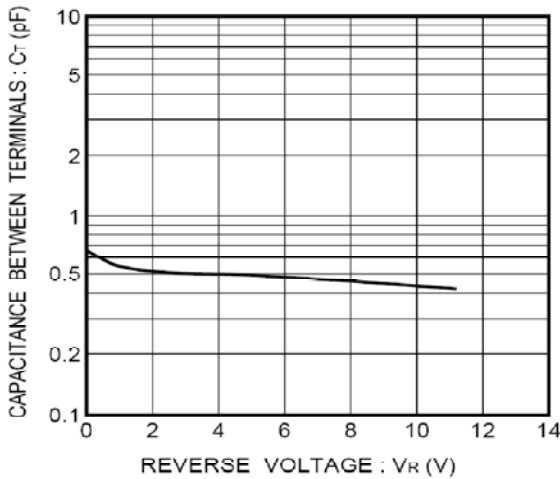


FIG.4 - Reverse recovery time characteristics

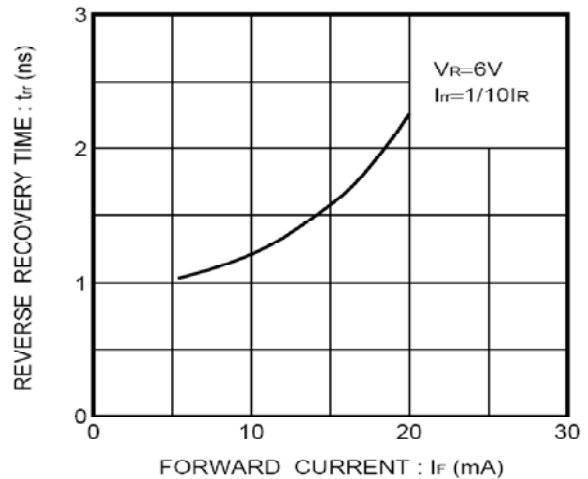


FIG.5 - Surge current characteristics

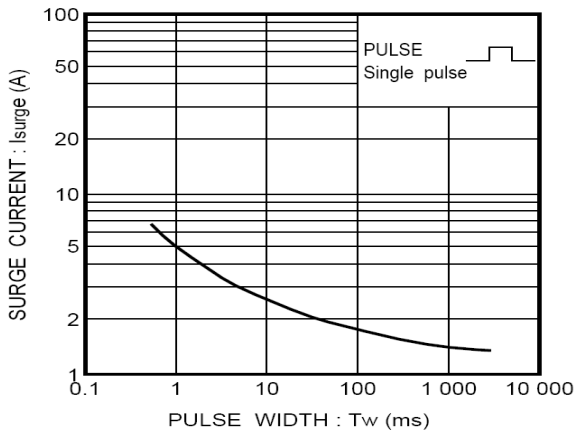


FIG.6 - Reverse recovery time (t_{rr}) measurement circuit

