

VII. Switching Diode

(c). SMD Type (SOD-323) 1SS380

(Package: SOD-323)

<p>FEATURES</p> <ul style="list-style-type: none"> • Fast switching speed. • Ideally suited for automated assembly processes. • For general purpose switching applications. • High reliability with high surge current handling capability. <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> • Case : Molded plastic, SOD-323 • Mounting position : Any • Polarity : Color band denotes cathode end <p>DEVICE MARKING CODE</p> <ul style="list-style-type: none"> • 1SS380 : 6D 	<p>Case: SOD-323 Dimensions in millimeters</p>
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Ratings & Electrical Characteristics

Characteristic	Symbol	Limits	Unit
Non-Repetitive peak reverse voltage	V_{RM}	40	Volts
DC reverse voltage	V_R	35	Volts
Forward voltage (Max) (@ $I_F=100mA$)	V_F	1.2	Volts
Average rectified output current	I_O	100	mA
Forward continuous current (Max)	I_{FM}	225	mA
Maximum reverse leakage current (@ $V_R=20V$)	I_R	10	nA
Surge current ($t=1.0s$)	$I_{(surge)}$	400	mA
Power dissipation	P_D	200	mW
Capacitance between terminals (Max) $V_R=0.5V, f=1.0MHz$	C_T	5	PF
Operating junction temperature	T_j	125	
Storage temperature range	T_{stg}	-55 to +125	

Ratings and Characteristic Curves of 1SS380

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

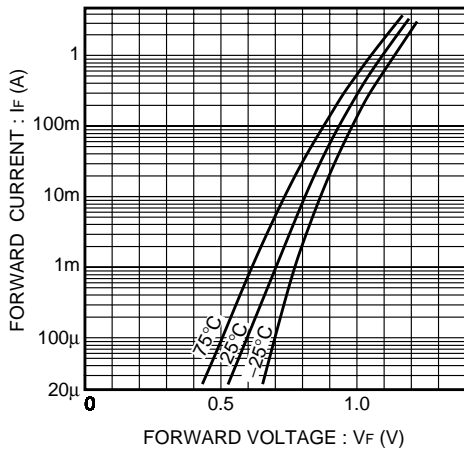


Fig. 1 Forward characteristics

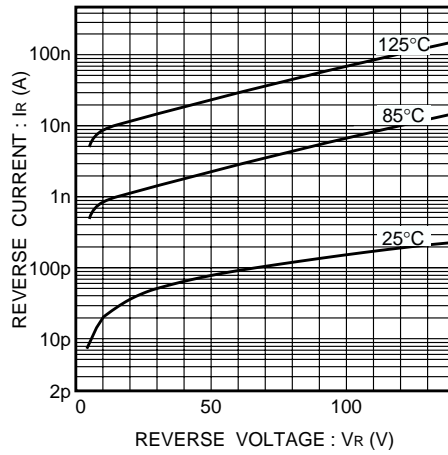


Fig. 2 Reverse characteristics

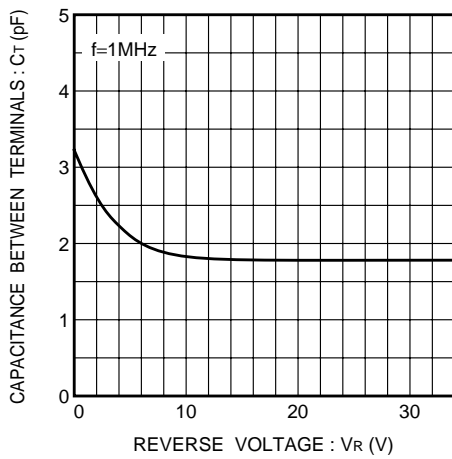


Fig. 3 Capacitance between terminals characteristics

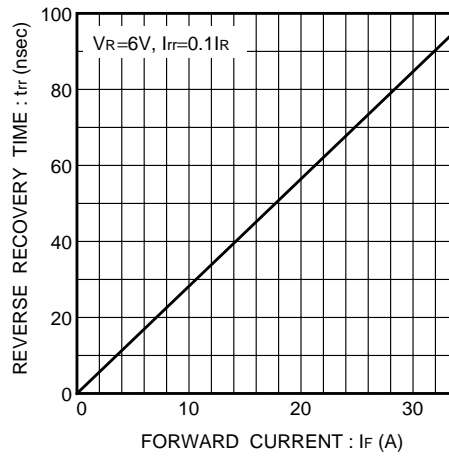


Fig. 4 Reverse recovery time characteristics

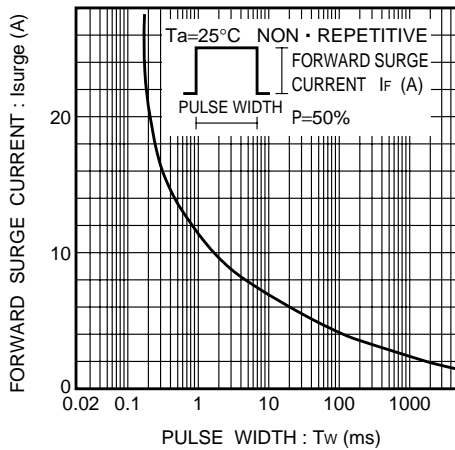


Fig. 5 Surge current characteristics

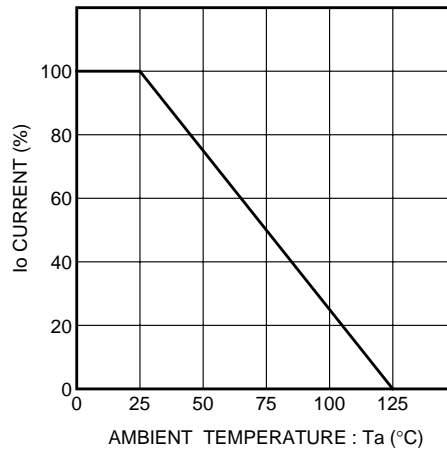


Fig. 6 Derating curve (mounting on glass epoxy PCBs)