

VII. Switching Diode

(c). SMD Type (SOD-323) 1SS355

(Package: SOD-323)

<p><u>FEATURES</u></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><u>MECHANICAL DATA</u></p> <ul style="list-style-type: none"> • Case : Molded plastic, SOD-323 • Mounting position : Any • Polarity : Color band denotes cathode end <p><u>DEVICE MARKING CODE</u></p> <ul style="list-style-type: none"> • 1SS355 : A 	<p>Case: SOD-323 Dimensions in millimeters</p>
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Ratings & Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20%.

Characteristic	Symbol	Limits	Unit
Non-Repetitive peak reverse voltage	V_{RM}	90	Volts
DC reverse voltage	V_R	80	Volts
Forward voltage (Max) (@ $I_F=100mA$)	V_F	1.2	Volts
Average rectified output current	I_O	100	mA
Maximum reverse leakage current (@ $V_R=80V$)	I_R	0.1	μA
Surge current ($t=1.0s$)	$I_{(surge)}$	500	mA
Power dissipation	P_d	200	mW
Capacitance between terminals (Max) $V_R=0.5V, f=1.0MHz$	C_T	3	PF
Reverse recovery time (Max) $I_F=10mA, V_R=6V, R_L=100$	T_{rr}	4	ns
Operating junction temperature	T_j	125	
Storage temperature range	T_{stg}	-55 to +150	

Ratings and Characteristic Curves of 1SS355

● Electrical characteristic curves (Ta=25°C)

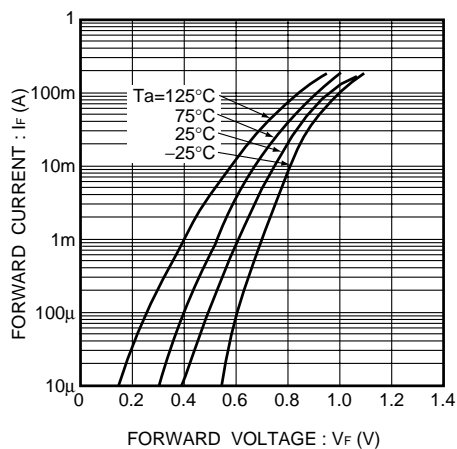


Fig.1 Forward characteristics

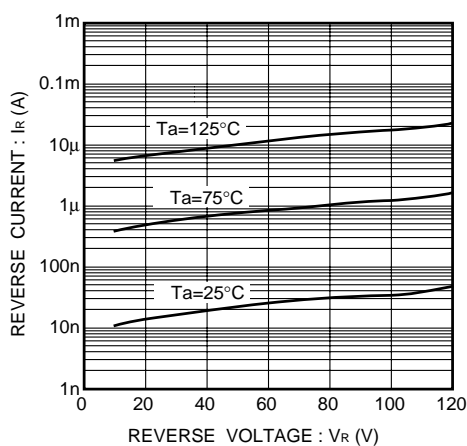


Fig.2 Reverse characteristics

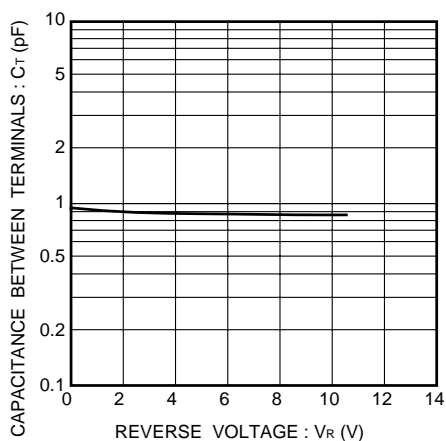


Fig.3 Capacitance between terminals characteristics

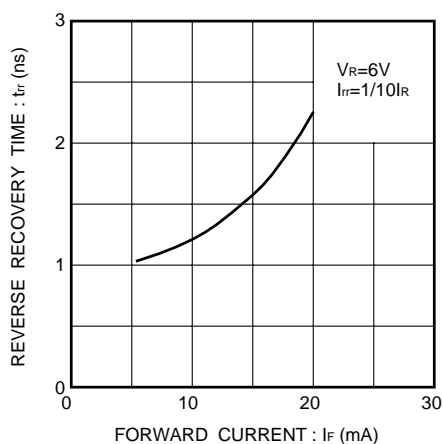


Fig.4 Reverse recovery time characteristics

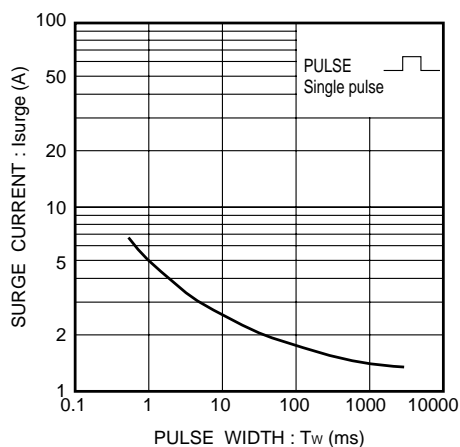


Fig.5 Surge current characteristics