

1SS355

SILICON EPITAXIAL HIGH SPEED SWITCHING DIODE

FEATURES :

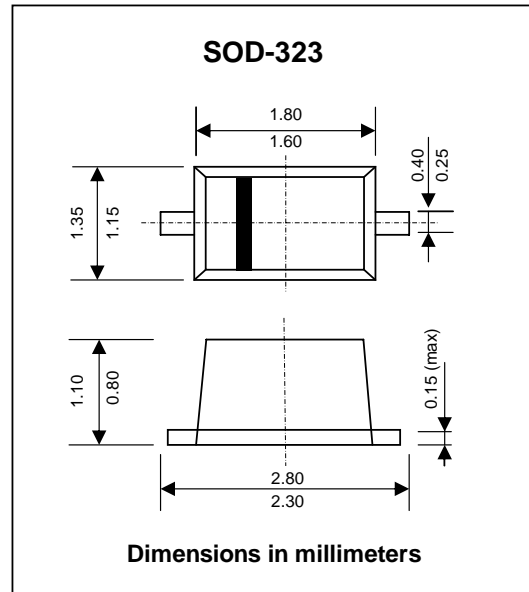
- Small plastic package suitable for surface mounted design
- High Speed ($T_{rr} = 1.2 \text{ ns Typ.}$)
- High reliability with high surge current handling capability
- Pb / RoHS Free

APPLICATIONS

- High speed switching

DESCRIPTION

- Silicon planar zener diode in a small plastic SMD SOD-323 package



Maximum Ratings and Thermal Characteristics (Rating at 25 °C ambient temperature unless otherwise specified.)

Parameter	Symbol	Value	Unit
Maximum Peak Reverse Voltage	V_{RRM}	90	V
Maximum DC Reverse Voltage	V_{RM}	80	V
Maximum Average Forward Current	I_F	100	mA
Maximum Peak Forward Current	I_{FM}	255	mA
Maximum Surge Current (1s)	I_{FSM}	500	mA
Maximum Junction Temperature	T_J	125	°C
Storage Temperature Range	T_S	-55 to + 125	°C

Electrical Characteristics ($T_a = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F = 100 \text{ mA}$	-	-	1.2	V
Reverse Current	I_R	$V_R = 80 \text{ V}$	-	-	0.1	μA
Capacitance between terminals	C_T	$f = 1\text{MHz} ; V_R = 0.5$	-	-	3.0	pF
Reverse Recovery Time	T_{rr}	$I_F = 10 \text{ mA} , V_R = 6 \text{ V}$ $R_L = 100 \Omega$	-	-	4.0	ns

RATING AND CHARACTERISTIC CURVES (1SS355)

FIG.1 - FORWARD CURRENT DERATING CURVE

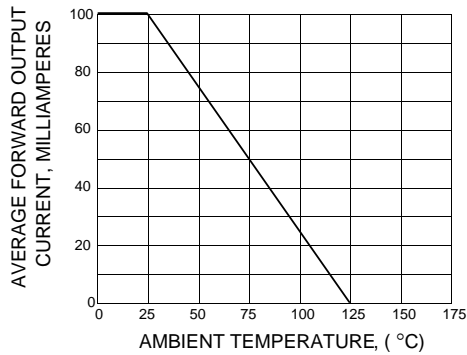


FIG.2 - MAXIMUM SURGE CURRENT

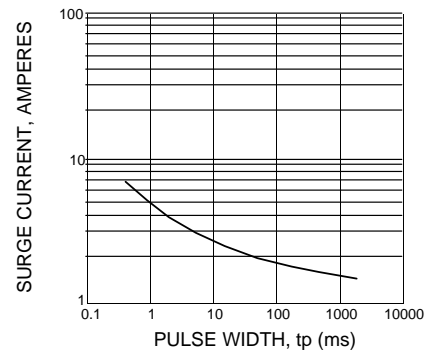


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

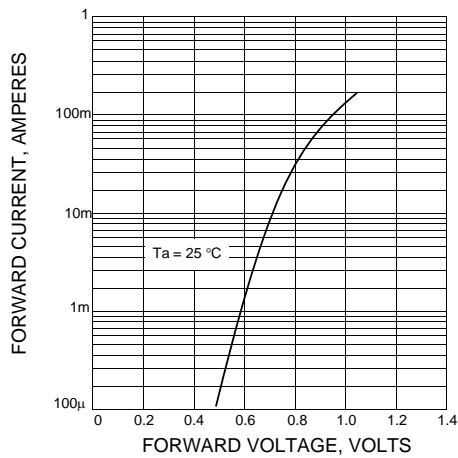


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

