

1SS352

SILICON EPITAXIAL HIGH SPEED SWITCHING DIODE

FEATURES :

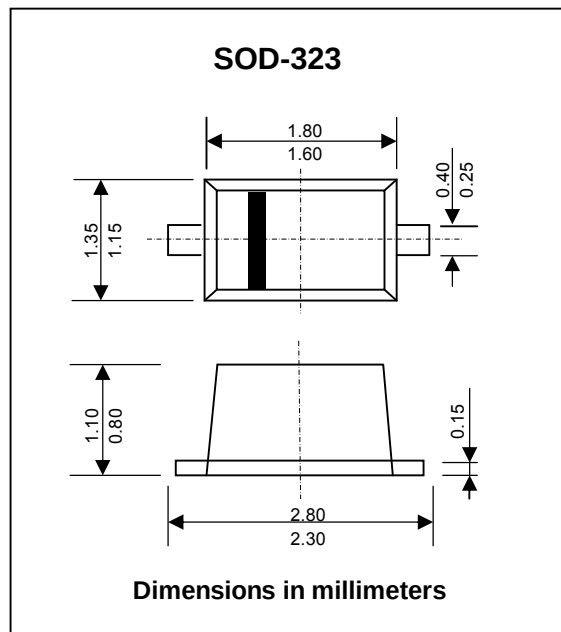
- Small plastic package suitable for surface mounted design
- High Speed ($T_{rr} = 1.6 \text{ ns Typ.}$)
- Low forward voltage ($V_F = 0.98 \text{ Typ.}$)
- Small total capacitance ($C_T = 0.5 \text{ pF Typ.}$)
- Pb / RoHS Free

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}	85	V
Maximum DC reverse voltage	V_{RM}	80	V
Maximum average forward current	I_F	100	mA
Maximum peak forward current	I_{FM}	200	mA
Maximum power dissipation	P_D	200 ⁽¹⁾	mW
Maximum surge current (10ms)	I_{FSM}	1.0	A
Operating junction temperature	T_J	125	°C
Storage temperature range	T_{STG}	-55 to + 125	°C

Note : (1) Mounted on a glass epoxy circuit board of 20 x 20 mm, pad dimension of 4 x 4

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

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F = 1\text{mA}$	-	0.62	-	V
		$I_F = 10\text{mA}$	-	0.75	-	
		$I_F = 100\text{mA}$	-	0.98	1.2	
Reverse Current	I_R	$V_R = 30 \text{ V}$	-	-	0.1	μA
		$V_R = 80 \text{ V}$	-	-	0.5	
Total Capacitance	C_T	$f = 1\text{MHz}; V_R = 0$	-	0.5	3.0	pF
Reverse Recovery Time	T_{rr}	$I_F = 10 \text{ mA}$	-	1.6	4.0	ns

RATING AND CHARACTERISTIC CURVES (1SS352)

FIG.1 - TYPICAL FORWARD CHARACTERISTICS

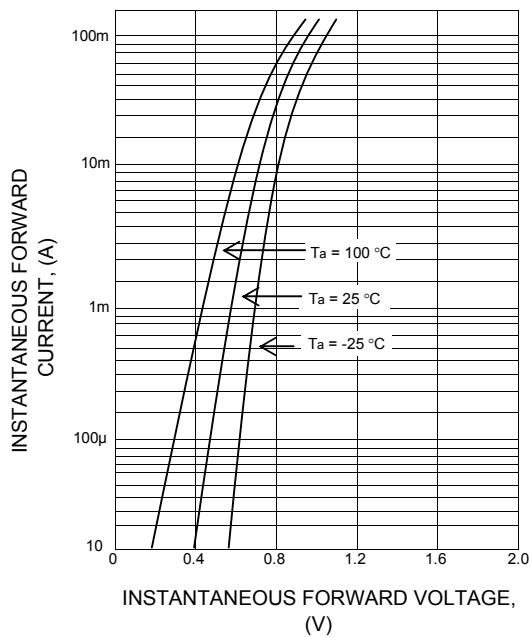


FIG.2 - TYPICAL REVERSE CHARACTERISTICS

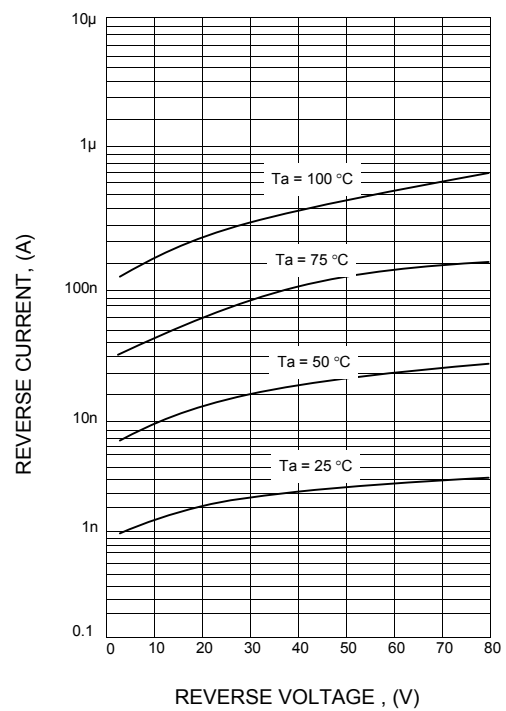


FIG.3 - TOTAL CAPACITANCE VS REVERSE VOLTAGE

