

200mW High Speed Switching Diode
Reverse Voltage 100 Volts Forward Current 0.2 Ampere
Features

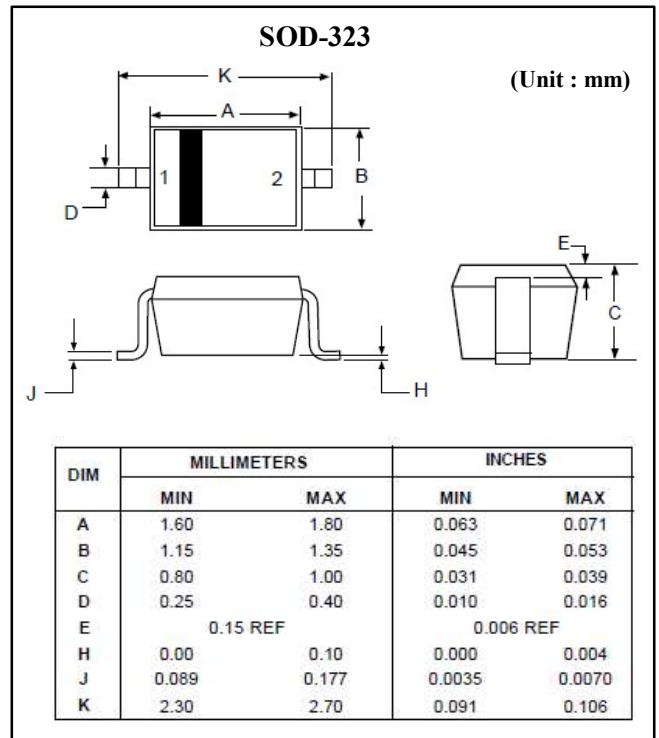
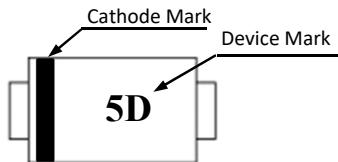
- General purpose diodes
- High switching speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For general purpose switching applications

Typical Applications

- High-speed switching.

Mechanical Data

- Case: SOD-323, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Indicated by Cathode Band

Marking

Absolute Maximum Ratings (Ta=25°C unless otherwise noted)

Parameter	Symbol	Rated Value	Unit
Maximum Non-Repetitive Peak Reverse Voltage	V_{RSM}	100	V
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	75	V
Non-Repetitive Peak Forward Surge Current	I_{FSM}	500	mA
Continuous Forward Current	I_O	200	mA
Total Device Power Dissipation FR-5 Board, Derate above 25°C	P_D	200 1.57	mW mW/°C
Thermal Resistance Junction to Ambient	$R_{th(j-a)}$	635	°C/W
Operation Junction Temperature Range	T_J	-55 to +150	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

Electrical Characteristics (Ta=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Min	Max	Unit
Breakdown Voltage	V_R	$I_R = 100\mu A$	100		V
		$I_R = 5\mu A$	75		V
Reverse Current	I_R	$V_R = 20V$	-	25	nA
		$V_R = 75V$	-	5.0	uA
Forward Voltage	V_F	$I_F = 1.0mA$	-	0.715	V
		$I_F = 10mA$	-	0.855	V
		$I_F = 50mA$	-	1.0	V
		$I_F = 150mA$	-	1.25	V
Total Capacitance	C_T	$V_R = 0V, f = 1MHz$	-	4.0	pF
Reverse Recovery Time	t_{rr}	$I_F = I_R = 10mA$	-	4.0	ns

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

Fig.1 Typical instantaneous forward characteristics

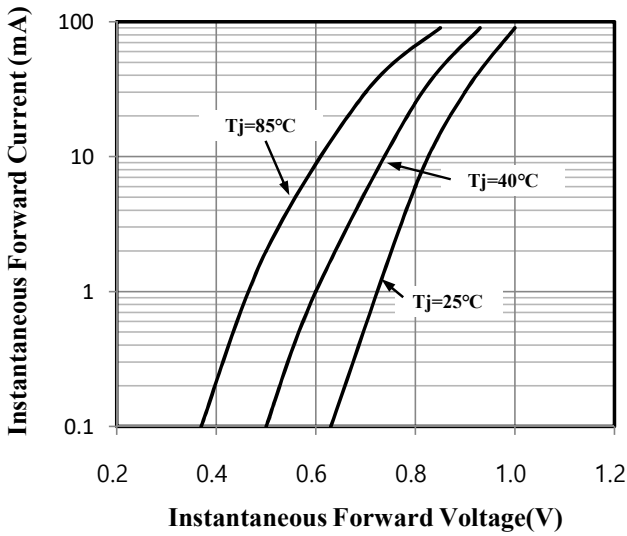


Fig.2 Typical Reverse Characteristics

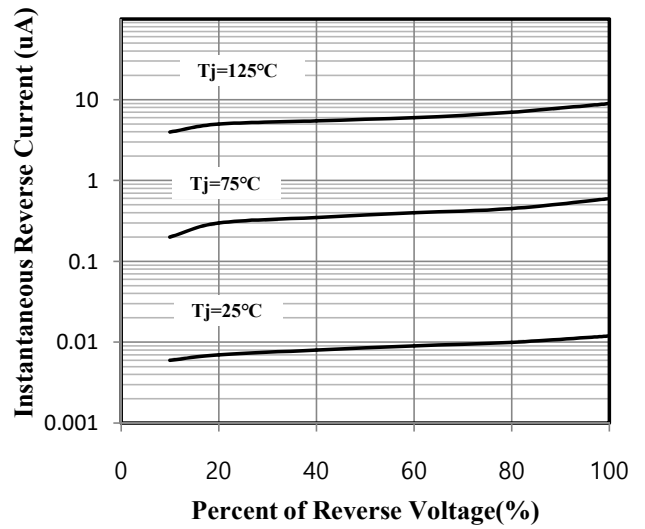


Fig.3 Admissible power dissipation versus ambient temperature

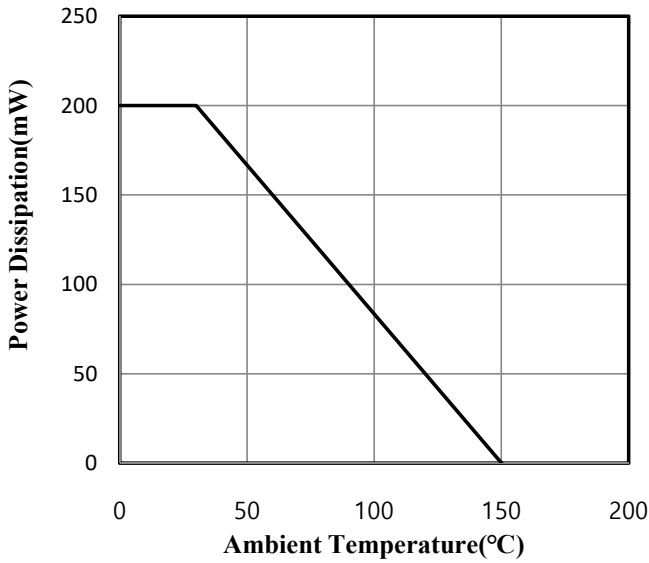


Fig.4 Relative capacitance versus reverse voltage

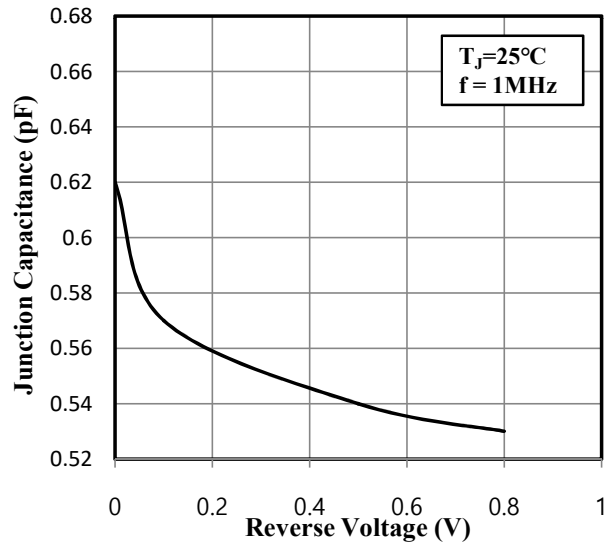
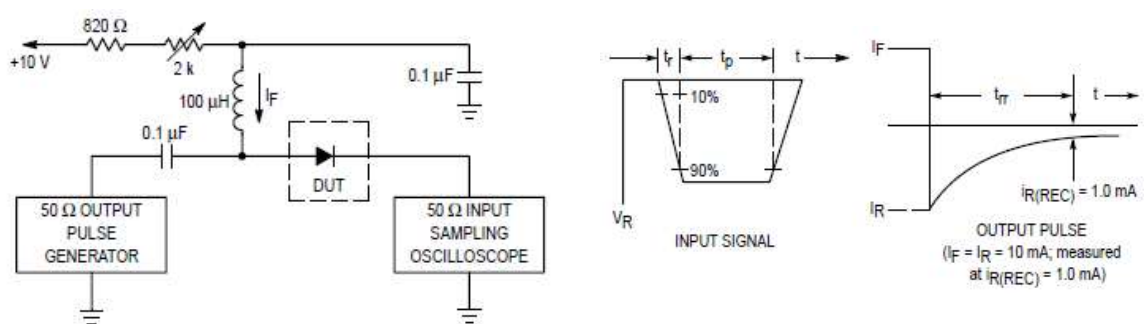


Fig.5 Recovery Time Equivalent Test Circuit



- Note :
1. A 2.0k Ω variable resistor adjusted for a Forward Current (I_F) of 10mA
 2. Input pulse is adjusted so $I_{R(PEAK)}$ is equal to 10mA.
 3. $t_p \gg t_{rr}$