



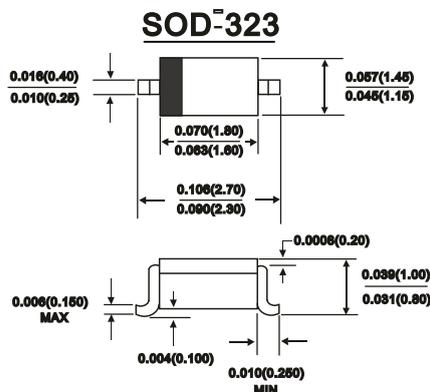
SMALL SIGNAL SWITCHING DIODES

FEATURES:

- High Speed
- Low rever Leakage Current
- Small Outline Surface Mount SOD-323 Package

MECHANICAL DATA

- Case : SOD-323 Plastic case
- Weight : Approx.0.02gram



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.
 Single phase half wave, 60 Hz resistive or inductive load.
 For capacitive load, derate current by 20%.

Characteristics	Symbol	Value	Unit	
Reverse Voltage	VR	100	Vdc	
Forward Current	IF	100	mAdc	
Peak Forward Surge Current	IFM(Surge)	500	mAdc	
Characteristics	Symbol	Max	Unit	
Total Device Dissipation FR-5 Board TA=25°C Derate Above 25°C	PD	225 1.8	mW mW/°C	
Thermal Resistance, Junction to Ambient	RθJA	556	C/W	
Total Device Dissipation Alumina Substrate,(2)TA=25°C Derate Above 25°C	PD	300 2.4	mW mW/°C	
Thermal Resistance, Junction to Ambient	RθJA	417	°C/W	
Junction and Storage Temperature	TJ, Tstg	-55 to + 125	°C	
(TA=25°C Unless Otherwise note)	Symbol	Min	Max	Unit
Reverse Breakdown Voltage (IR=100µAdc)	V(BR)	100	-	Vcc
Forward Voltage(IF=100mAdc)	VF	-	1200	mVdc
Reverse Voltage Leakage Current (VR=80Vdc)	IR	-	0.1	µAdc
Diode Capacitance (VR=0.5V, f=1.0MHz)	CT	-	3.5	pF
Reverse Recover Time (IF=IR=10mAdc)	trr	-	4.0	ns

1. FR-5=1.0x0.75x0.062 in 2.Alumina=0.4x0.3x0.024 in. 99.5% alumina.



Device Marking

Item	Marking	Equivalent Circuitdiagram
1SS 355	5D	1 ○ ——— ← ○ 2

Figure1. Forward Voltage

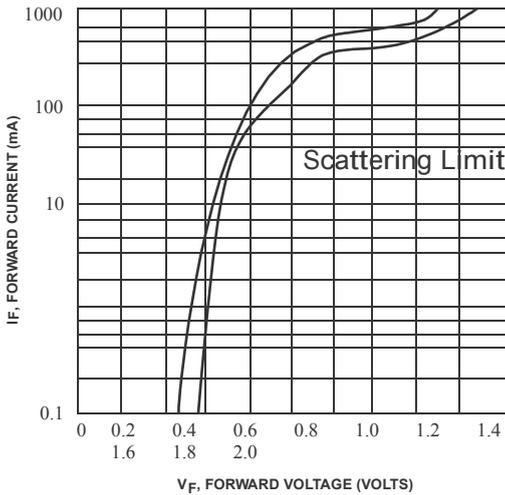


Figure 2. Leakage Current

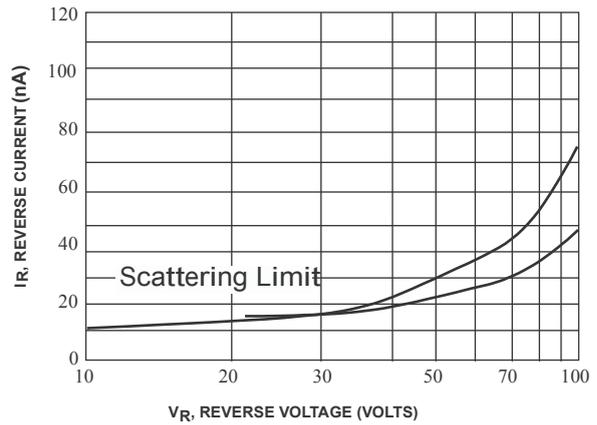


Figure 3. Capacitance

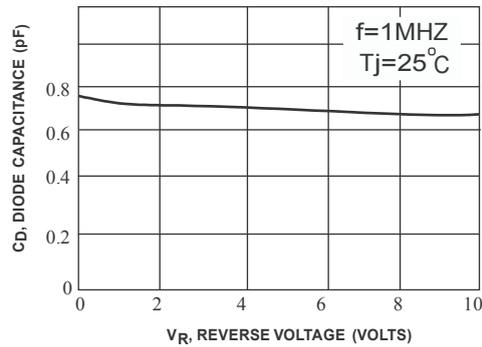
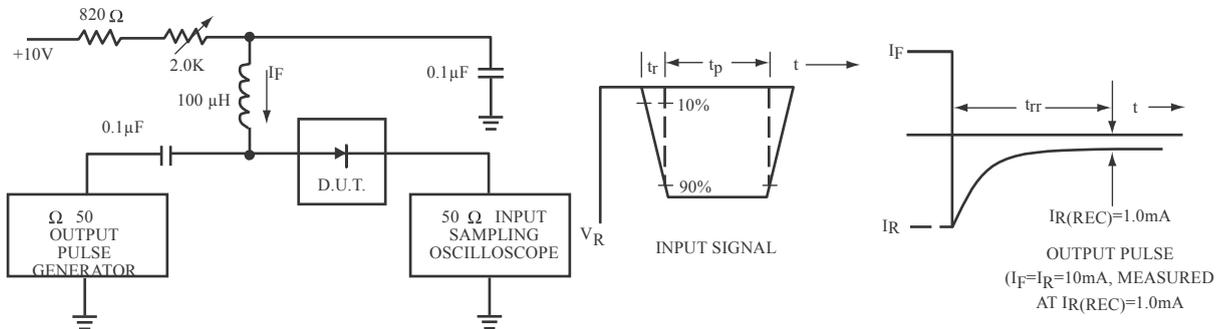


Figure 4. Recovery Time Equivalent Test Circuit



- Notes:1. A 2.0 kΩ variable resistor for a Forward Current (I_F) of 10 mA
- 2. Input pules is adjusted so $I_R(\text{peak})$ is equal to 10 mA
- 3. $t_p \gg t_{rr}$



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