



## 100V/100mA SURFACE MOUNT SWITCHING DIODE

# CASD355SG

**Features:**

- Small surface mounting type
- High reliability
- High speed( $t_{rr}<4ns$ )

**Mechanical data:**

- Case: Molded plastic, JEDEC SOD-323
- Terminals : Solder plated, solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band
- Mounting position: Any
- Weight: 0.000159 ounce, 0.0045 gram

**Absolute Maximum Ratings**(At  $T_a=25^{\circ}C$ , unless otherwise noted)

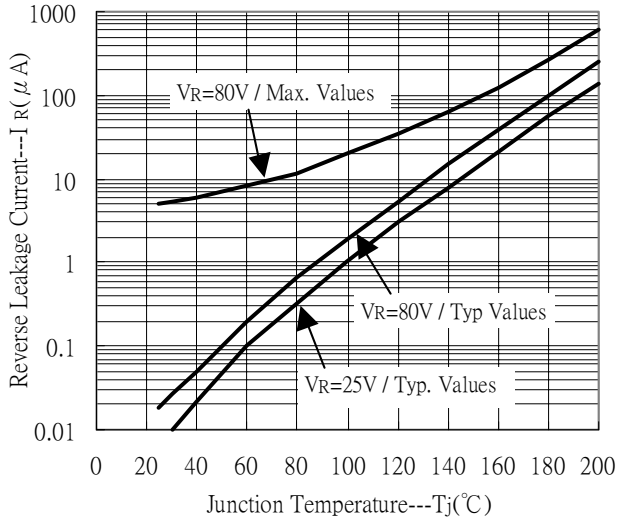
Characteristics	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	100	V
Average Forward Current, $V_R=0$	$I_{FAV}$	100	mA
Peak Forward Surge Current, $t_p<1s$	$I_{FSM}$	500	mA
Power Dissipation	$P_D$	350	mW
Junction Temperature	$T_j$	175	$^{\circ}C$
Storage Temperature Range	$T_{stg}$	-55 to +175	$^{\circ}C$

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

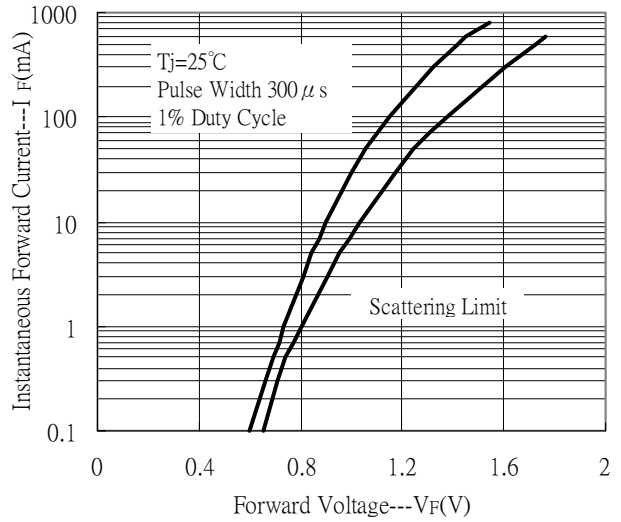
Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward Voltage	$I_F=10mA$	$V_F$	-	-	1.2	V
Reverse Current	$V_R=25V$	$I_R$	-	-	100	nA
	$V_R=25V, T_j=150^{\circ}C$	$I_R$	-	-	50	$\mu A$
	$V_R=80V$	$I_R$	-	-	30	$\mu A$
Breakdown Voltage	$I_R=100\mu A, T_p/T=0.01, T_p=0.3ms$	$V_{(BR)}$	100	-	-	V
Diode Capacitance	$V_R=0, f=1MHz, V_{HF}=50mV$	$C_D$			4	pF
Reverse Recovery Time	$I_F=10mA, V_R=6V, I_{RR}=0.1 \times I_R, R_L=100\Omega$	$t_{rr}$			4	ns

**Characteristic Curves**

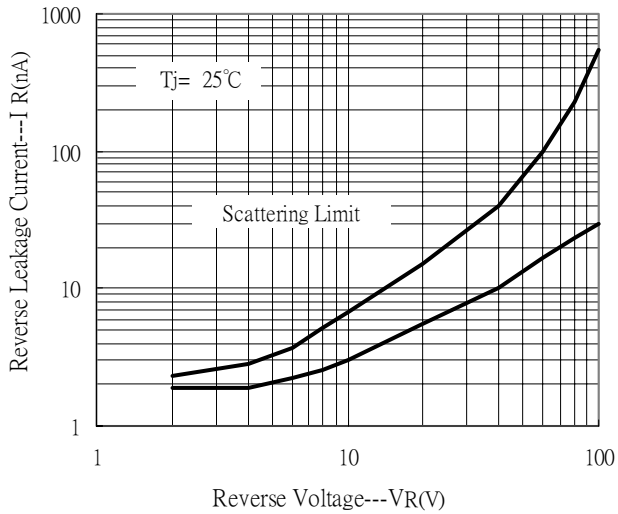
Reverse Leakage Current vs Junction Temperature



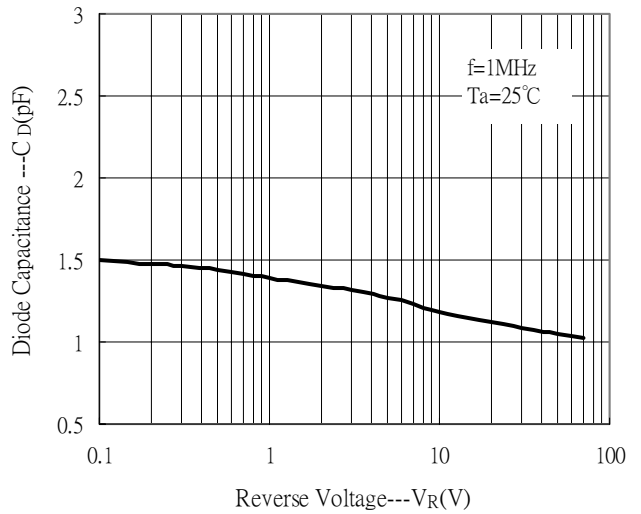
Forward Current vs Forward Voltage



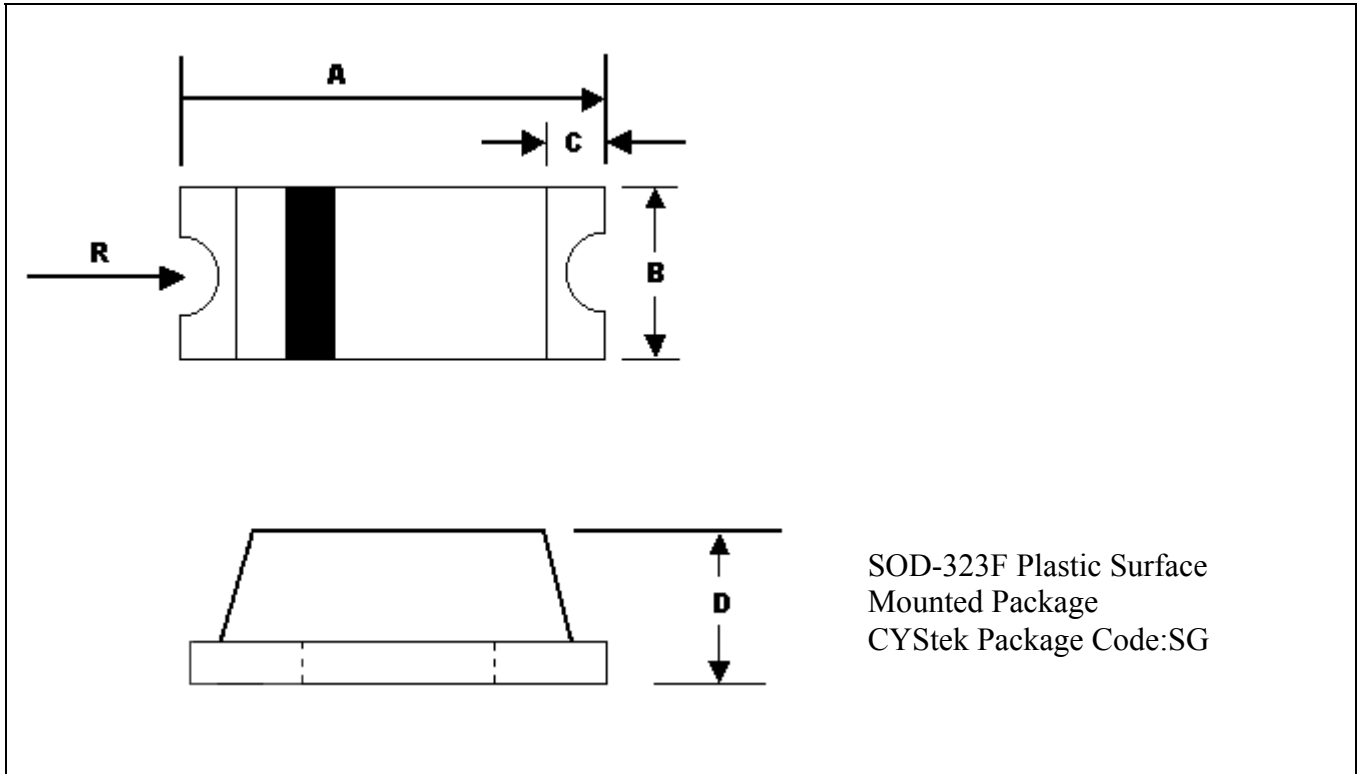
Reverse Leakage Current vs Reverse Voltage



Capacitance vs Reverse Voltage



**SOD-323F Dimension**



SOD-323F Plastic Surface Mounted Package  
 CYStek Package Code:SG

\*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.090	0.106	2.3	2.7	D	0.028	0.035	0.7	0.9
B	0.045	0.053	1.15	1.35	R	0.02(typ)		0.5(typ)	
C	0.012(typ)		0.3(typ)						

Notes : 1.Controlling dimension : millimeters.  
 2.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.  
 3.If there is any question with packing specification or packing method, please contact your local CYStek sales office.

**Material :**

- Lead : 42 Alloy ; solder plating
- Mold Compound : Epoxy resin family, flammability solid burning class:UL94V-0

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