SURFACE MOUNT SWITCHING DIODE

CDSN4148SE

Description

The CDSN4148SE is designed for high-speed switching application in hybrid thick-and thin-film circuits.

Features

- High speed switching
- High mounting capability, strong surge withstand, high reliability

Mechanical data

- Case:1206(3216) standard package, molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750 method 2026
- Polarity: Indicated by cathode band
- Mounting position: Any
- Weight: 0.0085 gram(approximately)

Absolute Maximum Ratings (at T_A=25°C unless otherwise specified)

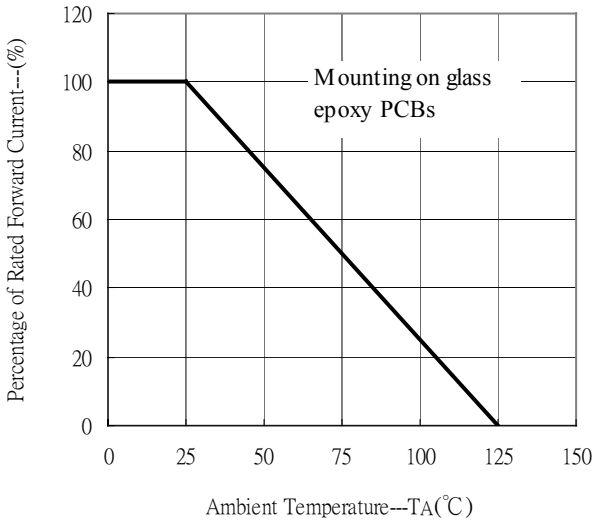
Characteristics	Symbol	Value	Unit
Reverse Voltage	V_R	75	V
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Average Forward Current	I_O	150	mA
Surge Forward Current @ tp=1 μs	I_{FSM}	4	A
Surge Forward Current @ tp=1 s	I_{FSM}	1	A
Power Dissipation	P_D	350	mW
Junction Temperature	Tj	-55 to +175	°C
Storage Temperature Range	Ts	-55 to +175	°C

Characteristics (at T_A=25°C unless otherwise specified)

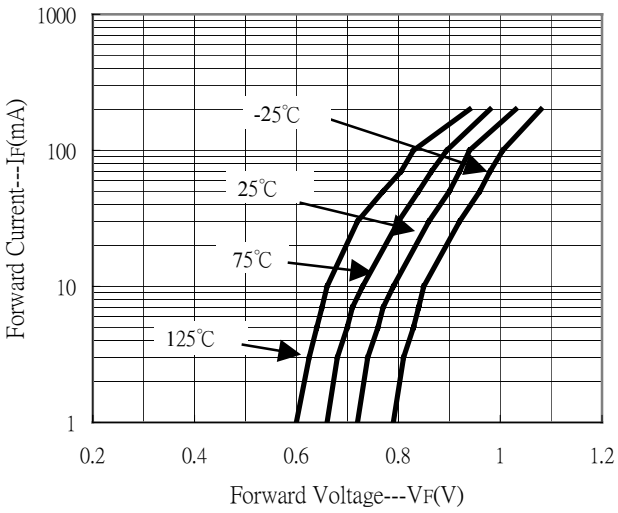
Characteristics		Symbol	Min	Typ	Max	Unit
Forward Voltage at I_F=50mA		V_F	-	-	1	V
Frverse Current	V_R=20V	I_R	-	-	25	nA
	V_R =75V	I_R	-	-	2.5	μA
Capacitance between terminals at f=1MHz and 0V reverse voltage		C_T	-	-	3	pF
Reverse Recovery Time From I_F=-I_R=10mA to I_{RR}=-1mA, V_R=6V, R_L=50Ω		t_{rr}	-	-	4	ns

Characteristic Curves

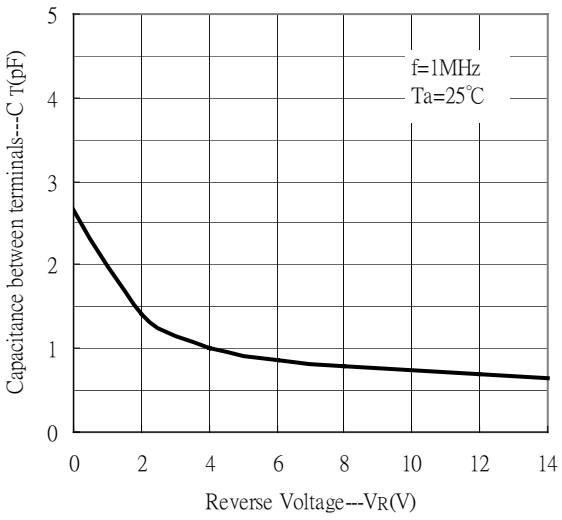
Forward Current Derating Curve



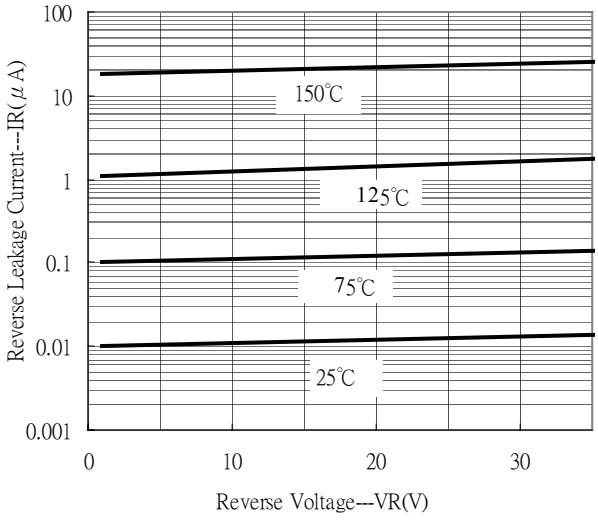
Forward Current vs Forward Voltage



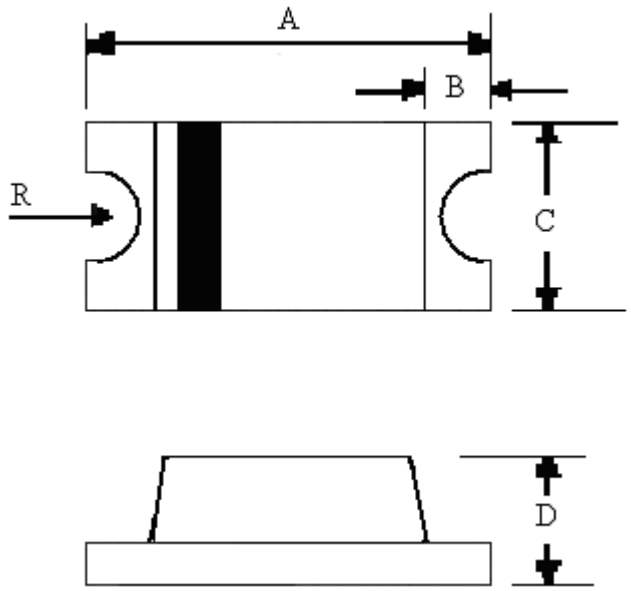
Capacitance vs Reverse Voltage



Reverse Leakage Current vs Reverse Voltage



1206 Dimension



1206 Plastic Surface Mounted Package
CYStek Package Code: SE

*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.118	0.126	3.00	3.20	D	0.035	0.043	0.90	1.10
B	0.020(typ)		0.50(typ)		R	0.010(typ)		0.25(typ)	
C	0.055	0.063	1.40	1.60					

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