

CYStech Electronics Corp.

Spec. No. : C329SE Issued Date : 2005.04.18 Revised Date :2006.06.07

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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 Ta=25°C unless otherwise specified)

Characteristics	Symbol	Value	Unit
Reverse Voltage	VR	75	V
Repetitive Peak Reverse Voltage	Vrrm	100	V
Average Forward Current	Io	150	mA
Surge Forward Current @ tp=1 µs @ tp=1 s	IFSM	4 1	A
Power Dissipation	PD	350	mW
Junction Temperature	Tj	-55 to +175	°C
Storage Temperature Range	Ts	-55 to +175	°C

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

	Symbol	Min	Тур	Max	Unit	
Forward Voltage at I _F =50mA			-	ı	1	V
Frverse Current	$V_R=20V$	_	-	-	25	nA
	$V_R = 75V$	I_R	-	-	2.5	μΑ
Capacitance between terminals at f=1MHz and 0V reverse voltage			-	ı	3	pF
Reverse Recovery Time From I_F =- I_R =10mA to I_{RR} =-1mA,			_	_	4	ns
$V_R=6V, R_L=50\Omega$						115



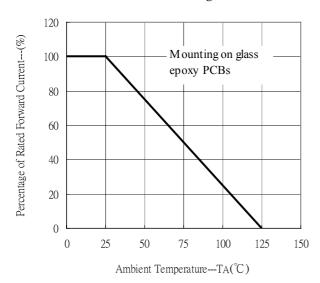
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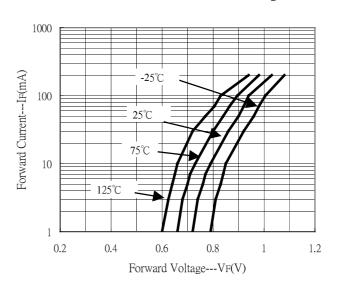
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Characteristic Curves

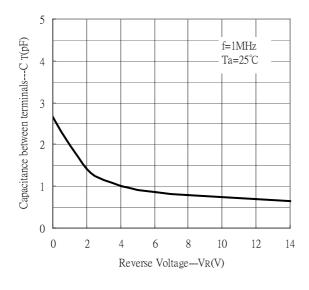
Forward Current Derating Curve



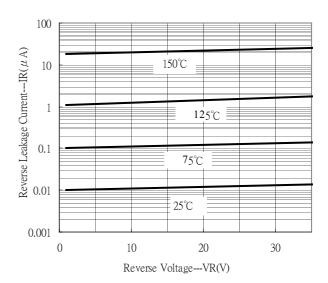
Forward Current vs Forward Voltage



Capacitance vs Reverse Voltage



Reverse Leakage Current vs Reverse Voltage



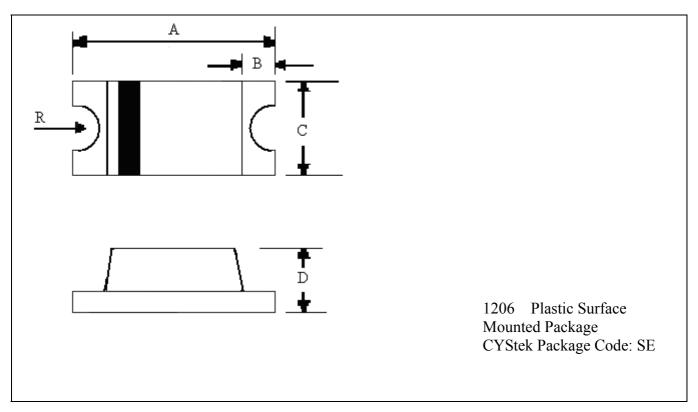


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1206 Dimension



*:Typical

									71	
DIM	Inc	hes	Millim	neters	DIM	Inches		Millimeters		
	Min.	Max.	Min.	Max.	ואווט	Min.	Max.	Min.	Max.	
Α	0.118	0.126	3.00	3.20	D	0.035	0.043	0.90	1.10	
В	0.020	0.020(typ)		(typ) 0.50(typ)		R	0.010(typ)		0.25(typ)	
С	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

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