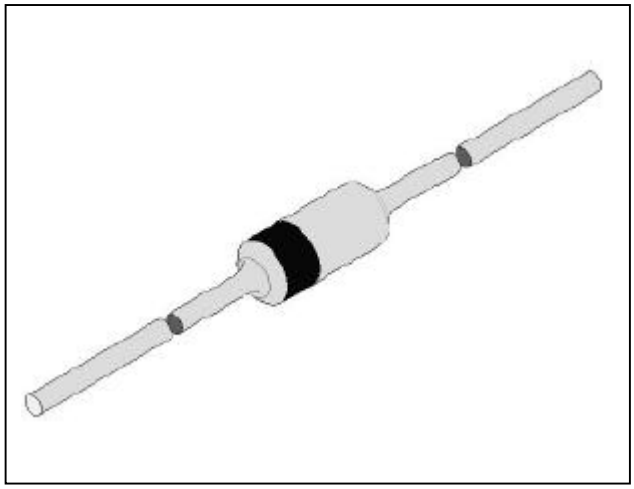
500mW DO-35 Hermetically glass sealed switching diode

1N4148LC



Features:

- High reliability
- High speed(trr<4ns)

Applications:

- Extremely fast switches

Construction:

Silicon epitaxial planar

Absolute Maximum Ratings(Tj=25℃, unless otherwise noted)

Characteristics	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Reverse Voltage	V_R	75	V
Forward Current	I_F	300	mA
Average Forward Current, V_R=0	I_{FAV}	150	mA
Peak Forward Surge Current, tp=1μs	I_{FSM}	2	A
Repetitive Peak Forward Surge Current	I_{FRM}	500	mA
Power Dissipation, T_L=25℃, 4mm from the case	P_D	500	mW
Junction Temperature	Tj	175	°C
Storage Temperature Range	Tstg	-65 to +175	°C

Maximum Thermal Resistance(Tj=25℃)

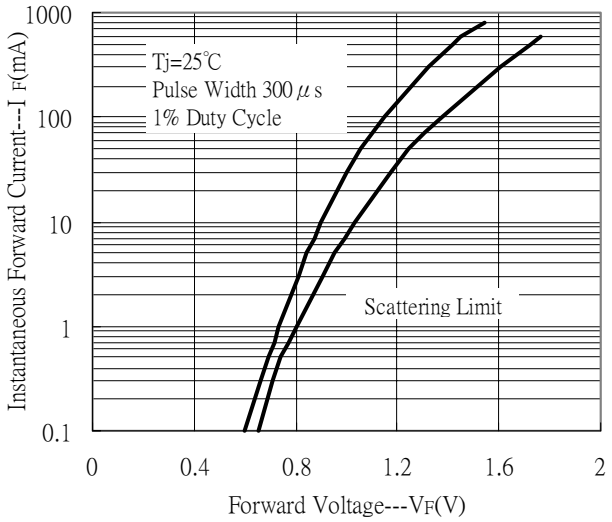
Parameter	Test Conditions	Symbol	Value	Unit
Junction to Ambient Resistance	l=4mm, T_L=constant	$R_{th,JA}$	350	°C/W

Electrical Characteristics (Tj=25°C, unless otherwise noted)

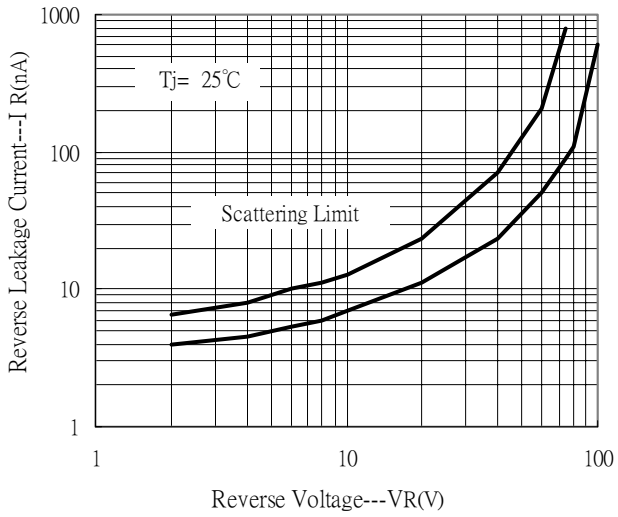
Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward Voltage	I_F=10mA	V_F	-	0.86	1	V
Reverse Current	V_R=20V	I_R	-	-	25	nA
	V_R=20V, Tj=150℃	I_R	-	-	50	μA
	V_R=75V	I_R	-	-	5	μA
Breakdown Voltage	I_R=100μA, Tp/T=0.01, Tp=0.3ms	$V_{(BR)}$	100	-	-	V
Diode Capacitance	V_R=0, f=1MHz, V_{HF}=50mV	C_D			4	pF
Rectification Efficiency	V_{HF}=2V, f=100MHz	η_R	45			%
Reverse Recovery Time	I_F=10mA,V_R=6V,I_{RR}=0.1×I_R, R_L=100Ω	t_{rr}			4	ns
	I_F=I_R=10mA,I_{RR}=1mA	t_{rr}			8	ns

Characteristic Curves

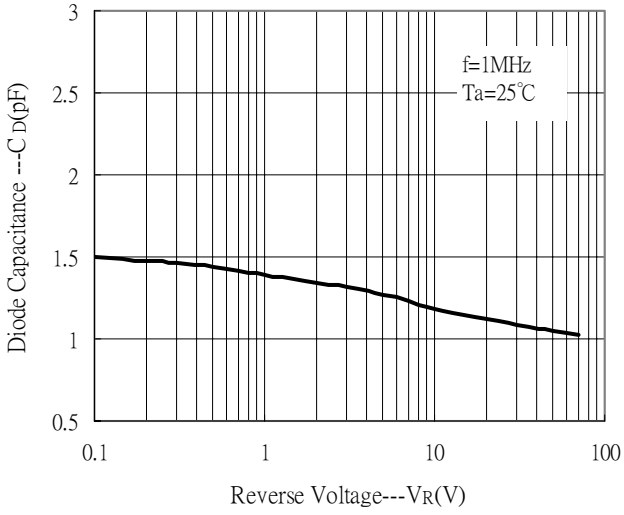
Forward Current vs Forward Voltage



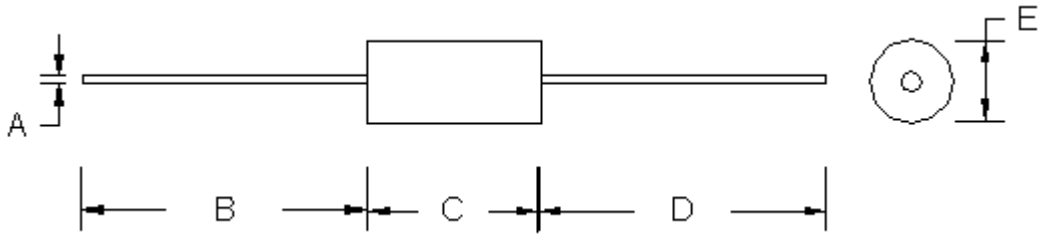
Reverse Leakage Current vs Reverse Voltage



Capacitance vs Reverse Voltage



DO-35(Glass) Dimension



DO-35 glass package, CYStek package code: LC

*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	ϕ0.0181	ϕ0.0220	ϕ0.46	ϕ0.56	D	0.9646	1.2811	24.50	32.54
B	0.9646	1.2811	24.50	32.54	E	ϕ0.0602	ϕ0.0787	ϕ1.53	ϕ2.00
C	0.1200	0.1700	3.05	4.20					

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.