

LL-34 Silicon Epitaxial Planar Switching Diode

Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- General Purpose Rectification
- Silicon Epitaxial Planar Construction

Applications

For use in low voltage,high frequency inverters,free wheeling,and polarity protection applications.

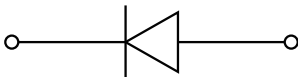
Mechanical Data

- Case: LL-34
- Molding compound meets UL 94V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Solder plated, solderable per MIL-STD-750,Method 2026
- Polarity: Color band denotes cathode

Function Diagram

Reverse Voltage
100V
Forward Current
0.2 Ampere

LL-34



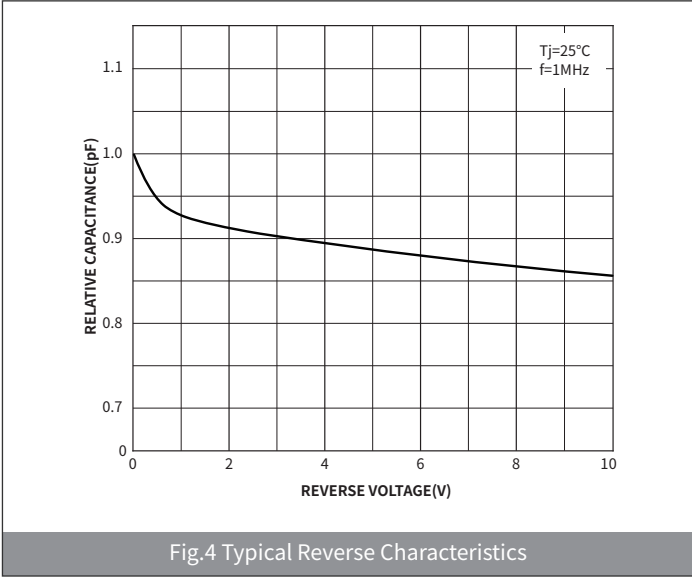
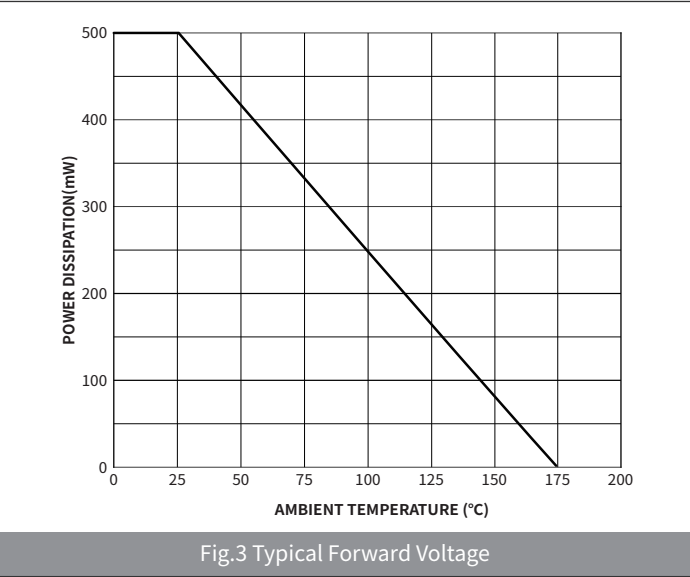
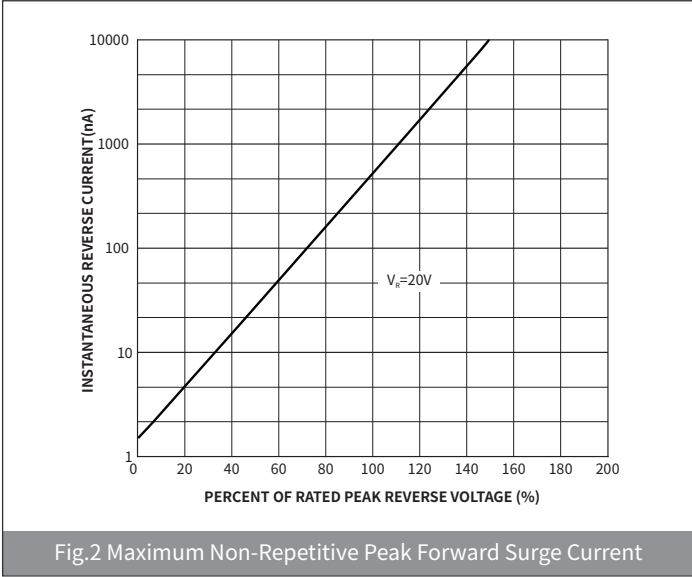
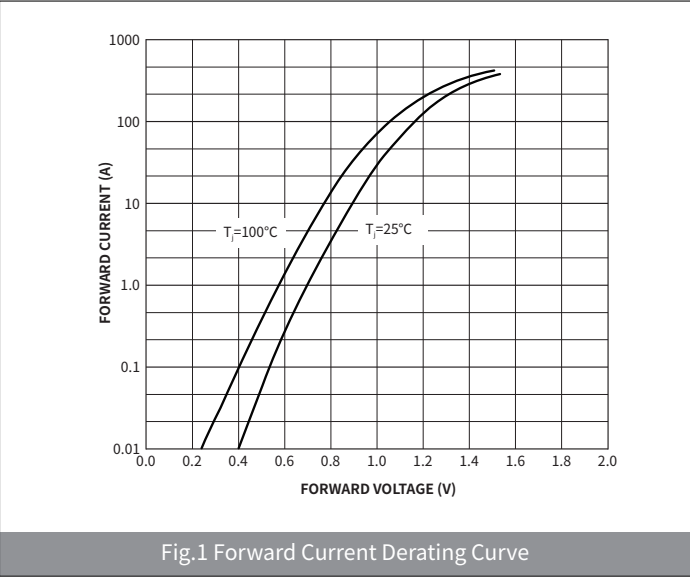
Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	LL4148
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	V	100
Reverse Voltage		V_R	V	75
Maximum Average Forward Rectified Current		$I_{F(AV)}$	A	0.2
Non-repetitive Peak Forward Surge Current	at t=1s	I_{FSM}	A	0.5
	at t=1ms			1
	at t=1μs			4
Power Dissipation		P_{tot}	mW	500
Storage temperature		T_{stg}	°C	-55 ~ +150
Junction temperature		T_j	°C	-55 ~ +150

● **Electrical Characteristics** (Ta=25°C Unless otherwise noted)

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	LL4148
Maximum instantaneous forward voltage	I _F =10mA	V _F	V	1.0
Maximum DC reverse currentat rated DC blocking voltage	V _R =20V	I _{R1}	nA	25
	V _R =75V	I _{R2}	μA	5
	V _R =20V, T _J =150°C	I _{R3}	μA	50
Capacitance	V _R =0V, f=1MHz	C _{tot}	pF	4
Voltage Rise when Switching ON tested with 50 mA Forward Pulses	tp=0.1s, Rise Time < 30ns, fp=5 to 100 KHz	V _{fr}	V	2.5
Reverse Recovery Time	I _F =10mA to I _R =1mA, Irr=0.1*I _{R3} ,V _R =6V,R _L =100Ω	t _{rr}	ns	4

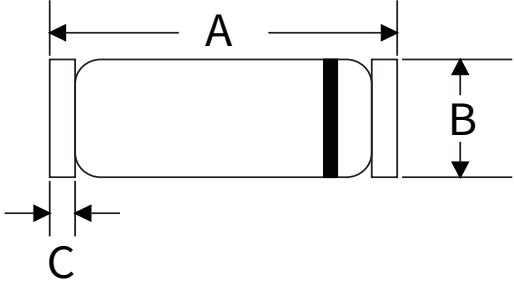
● **Ratings And Characteristics Curves** (Ta=25°C Unless otherwise specified)



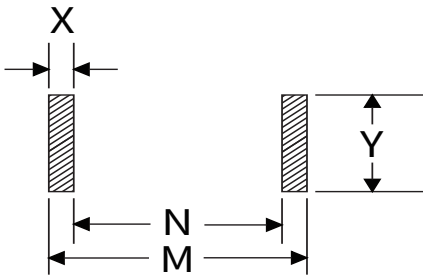
● Ordering Information

PACKAGE	PACKAGE CODE	UNIT WEIGHT(g)	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
LL-34	R1	0.03	2500	10000	100000	7"

● Package Outline Dimensions (LL-34)

	Symbol	Dimensions			
		Millimeters		Inches	
		Min.	Max.	Min.	Max.
A		3.30	3.60	0.130	0.142
B		1.40	1.50	0.055	0.059
C		0.25	0.33	0.010	0.013

● Suggested Pad Layout

	Symbol	Dimensions			
		Millimeters		Inches	
		Min.	Max.	Min.	Max.
X		—	1.25	—	0.049
Y		—	2.00	—	0.079
N		—	2.50	—	0.098
M		—	5.00	—	0.197