



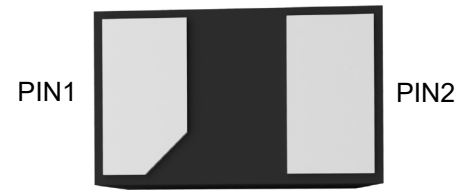
1N4148DB

Silicon Epitaxial Planar Switching Diode

Features

- High Voltage
- Small Package
- Small Capacitance
- Halogen and Antimony Free
- Moisture Sensitivity Level 1

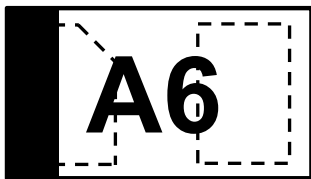
DFN1x0.6-2L



Bottom View

1.Cathode ← 2.Anode

Marking Code



Top View

Absolute Maximum Ratings at $T_A = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Value	Unit
Maximum Repetitive Reverse Voltage	V_{RRM}	100	V
Reverse Voltage	V_R	75	V
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
DC Forward Current	I_{FM}	600	mA
Repetitive Peak Forward Current	I_{FRM}	700	mA
Non-repetitive Peak Forward Surge Current	I_{FSM}	1 4	A
		at t = 1 s at t = 1 μ s	
Power Dissipation	P_D	250	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$



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Characteristics at $T_A = 25\text{ }^\circ\text{C}$

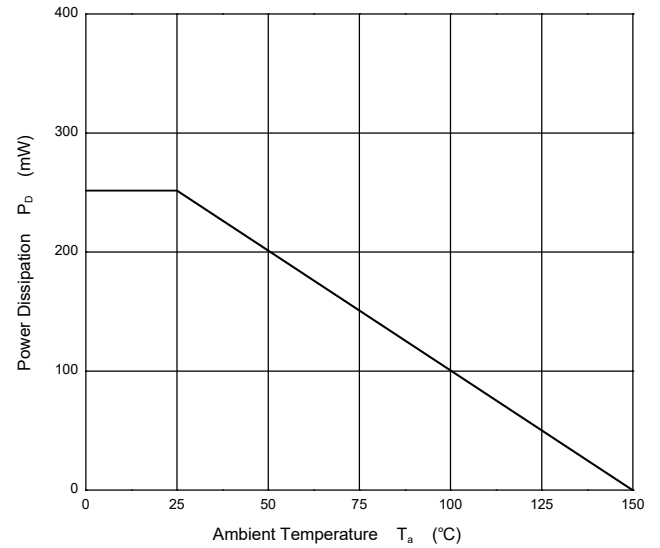
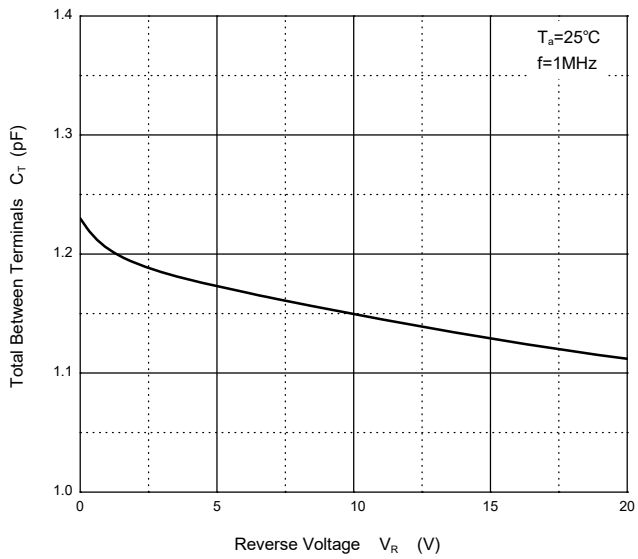
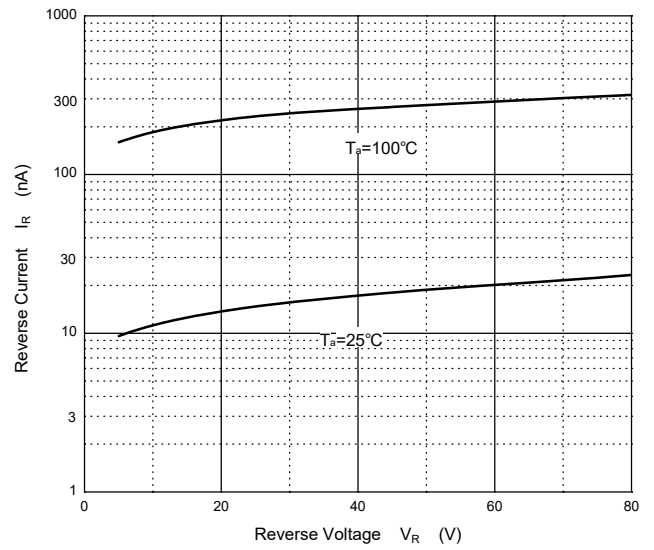
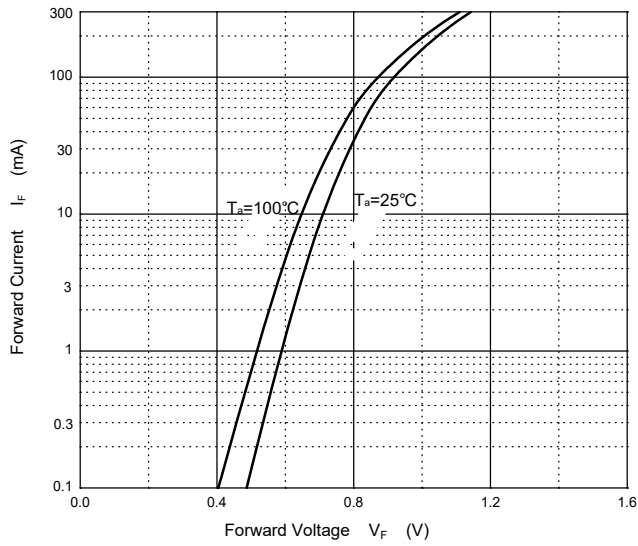
Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 10\text{ mA}$	V_F	--	0.85	V
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$ at $I_R = 5\text{ }\mu\text{A}$	$V_{(BR)R}$	100 75	-- --	V
Reverse Current at $V_R = 20\text{ V}$ at $V_R = 75\text{ V}$ at $V_R = 20\text{ V}$, at $T_A = 150\text{ }^\circ\text{C}$	I_R	-- -- --	35 1 50	nA μA μA
Typical Junction Capacitance at $V_R = 0\text{ V}$, $f = 1\text{ MHz}$	C_j	--	4	pF
Maximum Reverse Recovery Time at $I_F = 10\text{ mA}$, $V_R = 6\text{ V}$, $I_{RR} = 1\text{ mA}$, $R_L = 100\text{ }\Omega$	T_{rr}	--	4	nS



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Typical Characteristic Curves





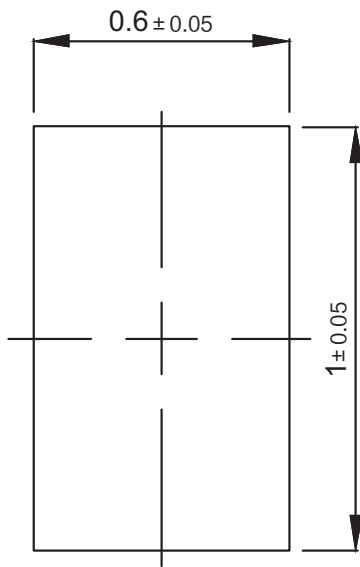
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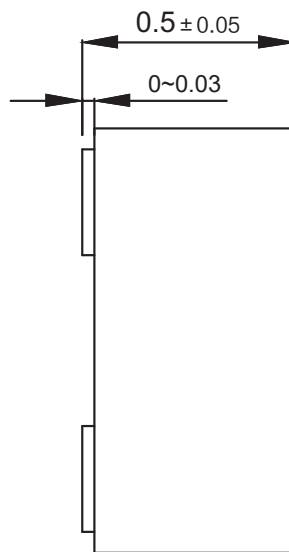
Package Outline

DFN1x0.6-2L-0011

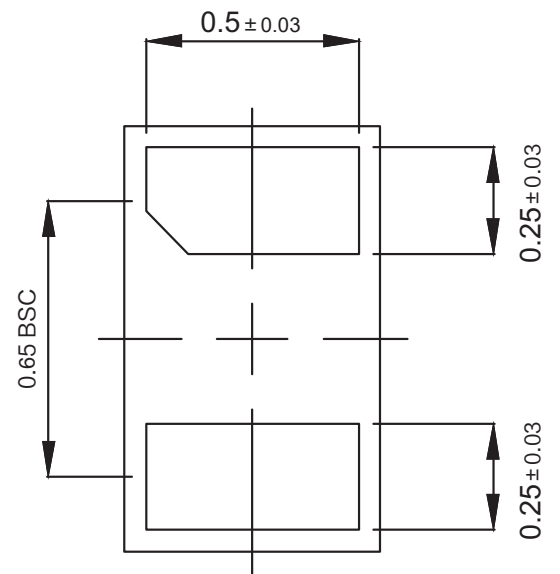
Dimensions in mm



TOP VIEW



SIDE VIEW



BOTTOM VIEW

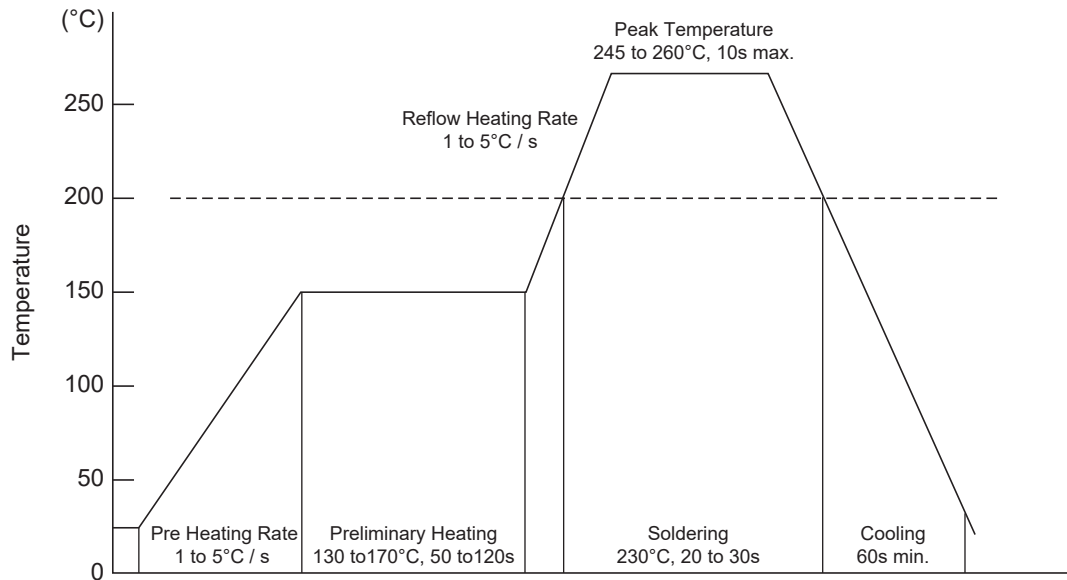
Ordering Information

Device	Package	Shipping
1N4148DB	DFN1x0.6-2L	10,000PCS/Reel&7inches



Conditions of Soldering and Storage

◆ Recommended condition of reflow soldering



Recommended peak temperature is over 245°C. If peak temperature is below 245°C, you may adjust the following parameters:

- Time length of peak temperature (longer)
- Time length of soldering (longer)
- Thickness of solder paste (thicker)

◆ Conditions of hand soldering

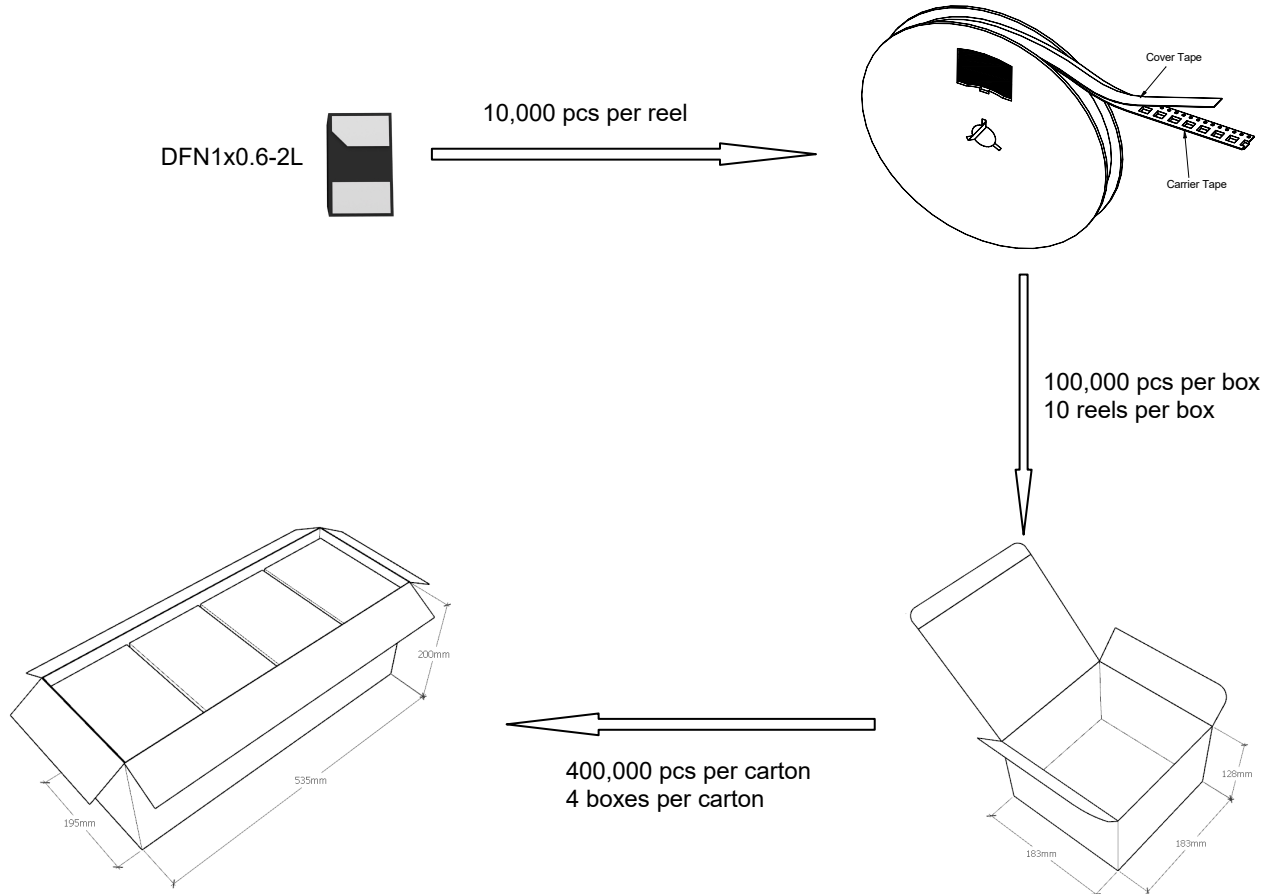
- Temperature: 300°C
- Time: 3s max.
- Times: one time

◆ Storage conditions

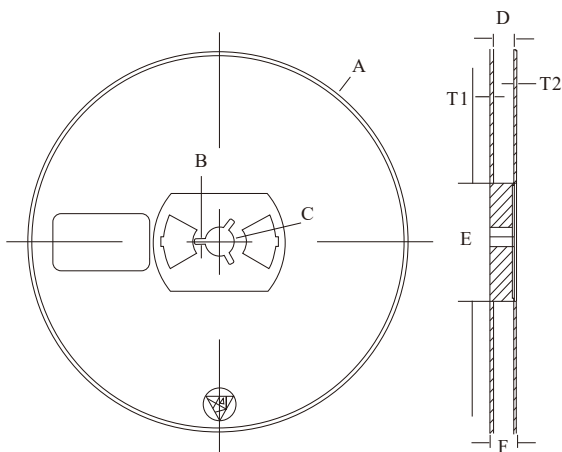
- **Temperature**
5 to 40°C
- **Humidity**
30 to 80% RH
- **Recommended period**
One year after manufacturing

Package Specifications

- The method of packaging



◆ reel data



Reel (7")

Symbol	Value (unit: mm)
A	Ø 177.8±1
B	2.7±0.2
C	Ø 13.5±0.2
E	Ø 54.5±0.2
F	12.3±0.3
D	9.6+2/-0.3
T1	1.0±0.2
T2	1.2±0.2



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◆ Embossed tape data

