

SWITCHING DIODE

Features

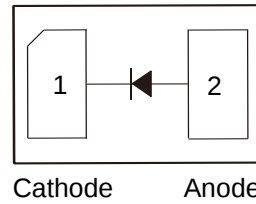
- Extremely small surface mounting type.
- High Speed

Mechanical Data

- Package: DFN1006-2
- Molding Compound: UL Flammability Classification Rating 94V-0
- Terminals: Matte tin-plated leads; solderability-per MIL-STD-202, Method 208
- Device meets MSL 1 requirements

Application information

- High speed switching

Schematic and Pin configuration

T8= Device Making Code

Ordering Information

Part Number	Shipping	Reel Size
1N4148CS	10000/Tape & Reel	7 inch

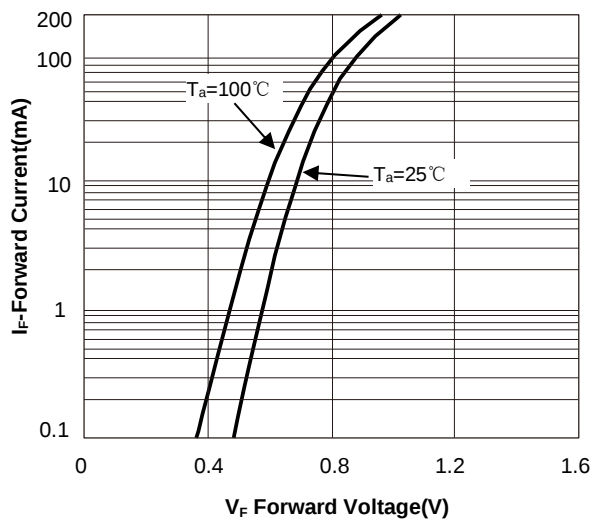
Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak reverse voltage	V_{RM}	90	V
DC reverse voltage	V_R	80	V
Peak forward current	I_{FM}	225	mA
Mean rectifying current	I_O	100	mA
Surge Current@t= 1s	I_{SURGE}	500	mA
Junction temperature	T_j	125	$^{\circ}\text{C}$
Storage temperature	T_{STG}	-40~125	$^{\circ}\text{C}$

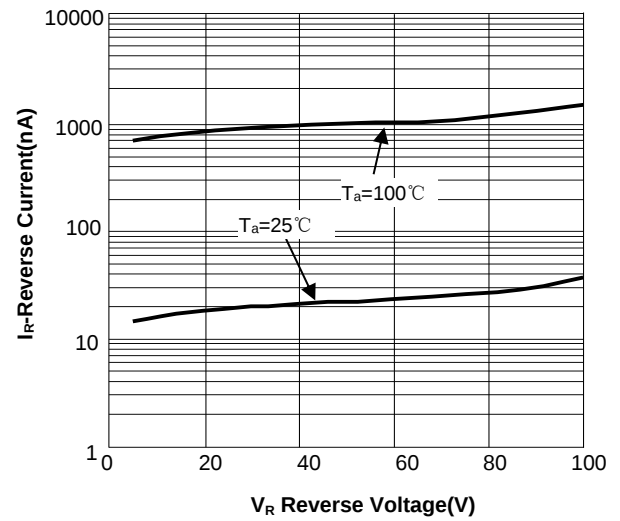
Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse current	I_R	-	-	0.1	μA	$V_R=80\text{V}$
Forward voltage	V_F	-	-	1.2	V	$I_F=100\text{mA}$
Total capacitance	C_{tot}	-	-	3	pF	$V_R=0\text{V}, f=1\text{MHz}$
Reverse recovery time	t_{rr}	-	-	4	nS	$V_R=6\text{V}, I_F=10\text{mA}, R_L=100\Omega$

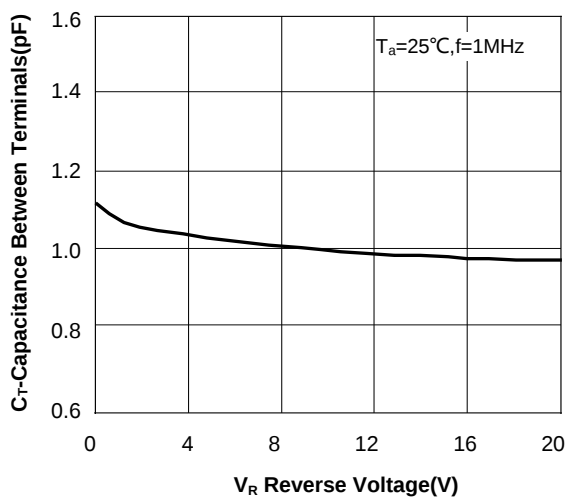
Typical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise specified)



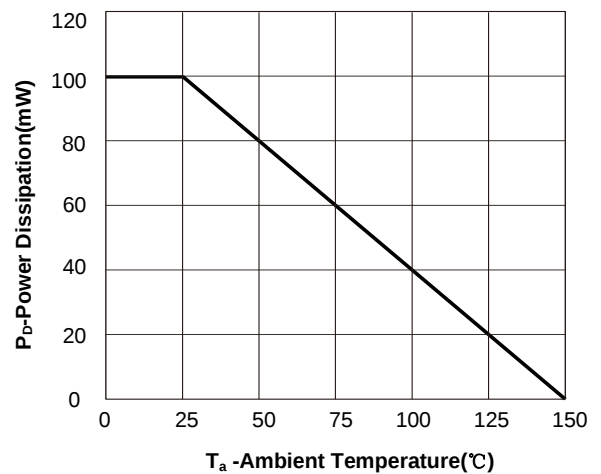
Forward Current vs. Forward Voltage



Forward Current vs. Reverse Voltage

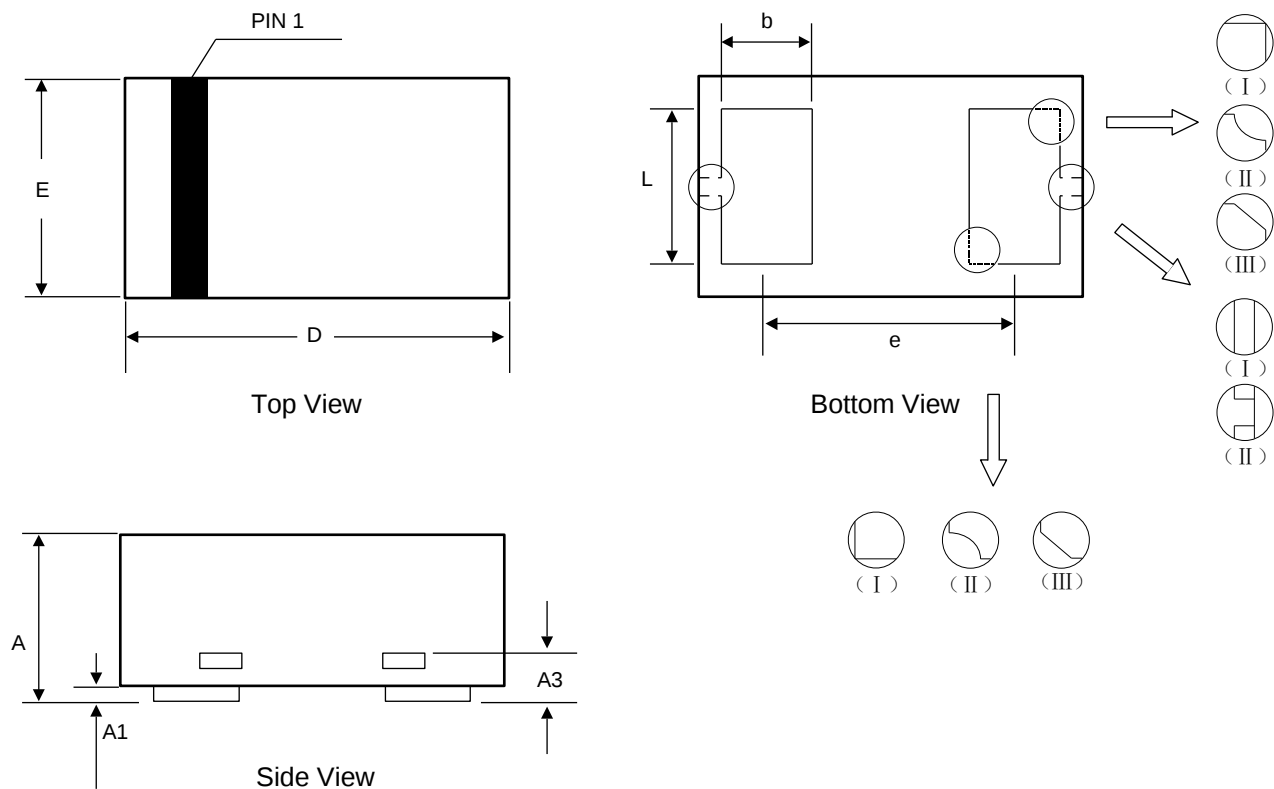


Forward Current vs. Reverse Voltage



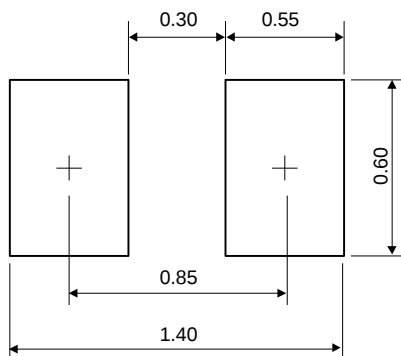
Forward Current vs. Ambient Temperature

DFN1006-2 Package Outline Drawing



Symbol	Dimensions in Millimeters		
	Min.	Typ.	Max.
A	0.340	0.450	0.550
A1	0.000	0.020	0.050
A3	0.125 Ref.		
D	0.950	1.000	1.075
E	0.490	0.600	0.675
b	0.200	0.250	0.300
L	0.450	0.500	0.550
e	0.650 BSC		

Recommended PCB Layout (Unit: mm)

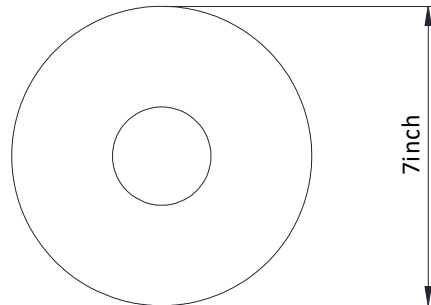


Notes:

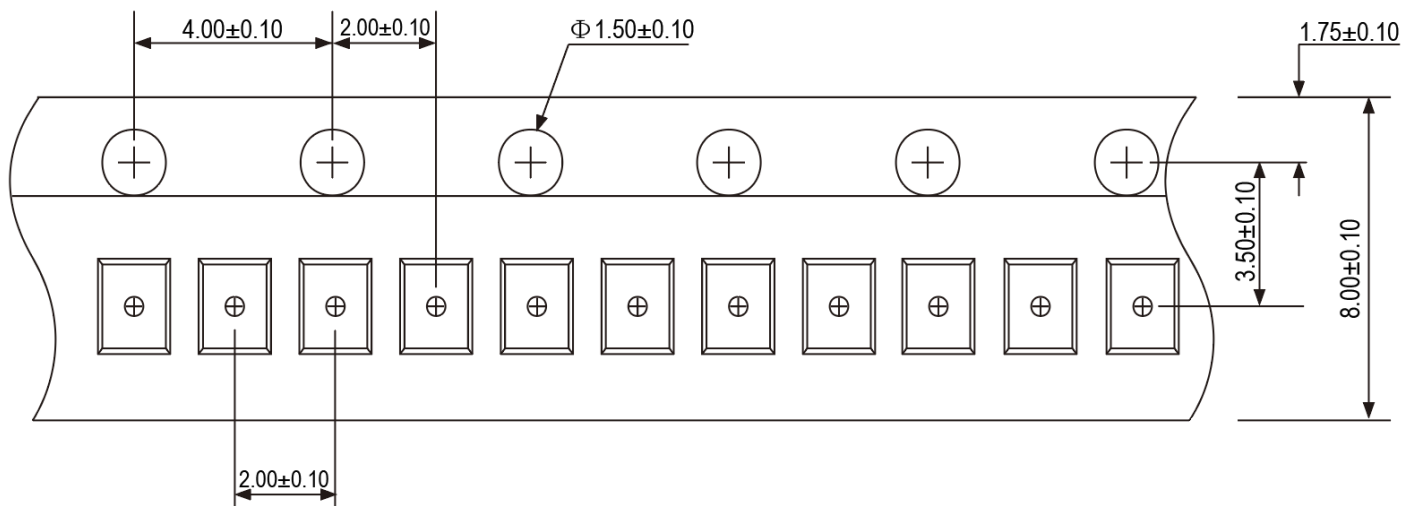
This recommended land pattern is for reference purposes only. Please consult your manufacturing group to ensure your PCB design guidelines are met.

TAPE AND REEL INFORMATION

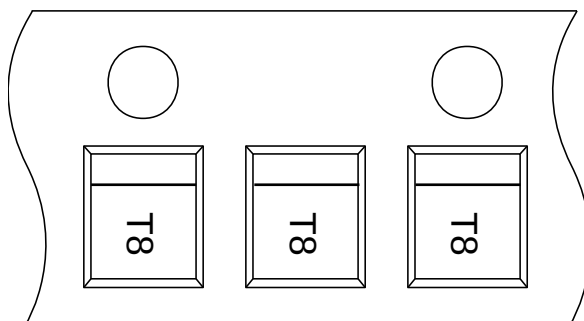
Reel Dimensions



Tape Dimensions



Unit:mm



User Direction of Feed

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