

Silicon Epitaxial Planar Diode

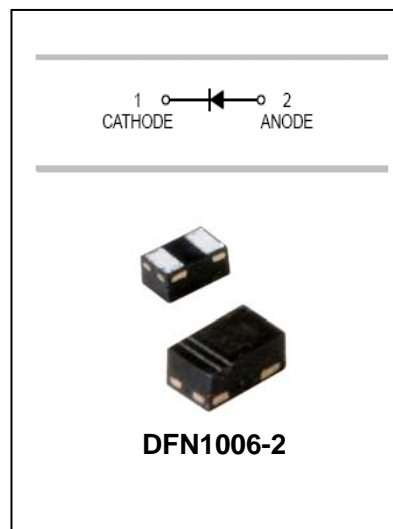
1N4448L

FEATURES

- Fast Switching Speed
- Ultra-Small Surface Mount Package
- For General Purpose Switching Applications
- High Conductance



Lead-free



APPLICATIONS

- Surface mount fast switching diode.

ORDERING INFORMATION

Type No.	Marking	Package Code
1N4448L	T5	DFN1006-2

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage	V_{RRM}	80	V
Working Peak Reverse Voltage	V_{RWM}		
DC Reverse Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	57	V
Forward Continuous Current	I_{FM}	250	mA
Average Rectified Output Current	I_o	150	mA
Non-Repetitive Peak Forward Surge Current @t=1.0 μ s @t=1.0 s	I_{FSM}	2.0 1.0	A
Power Dissipation	P_d	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500	$^{\circ}C/W$
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150	$^{\circ}C$

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ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	80	-	V	$I_R=100\mu A$
Forward Voltage	V_F	0.62	0.72 0.855 1.0 1.25	V	$I_F=5.0mA$ $I_F=10mA$ $I_F=100mA$ $I_F=150mA$
Reverse Current	I_R		100 50 30 25	nA μA μA nA	$V_R=80V$ $V_R=75V, T_J=150^\circ C$ $V_R=25V, T_J=150^\circ C$ $V_R=20V$
Total Capacitance	C_T		3.0	pF	$V_R=0.5V, f=1.0MHz$
Reverse Recovery Time	t_{rr}	-	4.0	ns	$I_F=I_R=10mA,$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

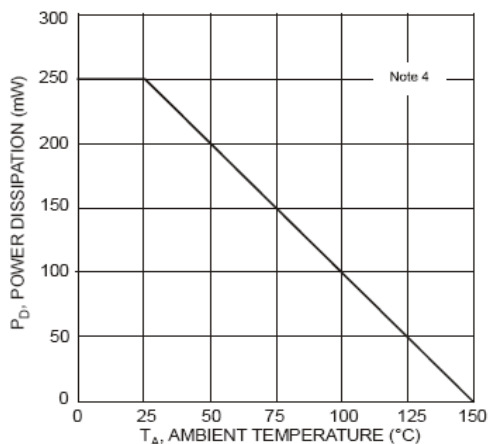


Fig. 1 Power Derating Curve

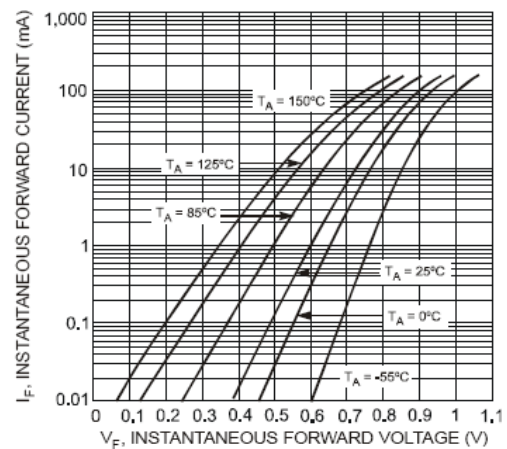


Fig. 2 Typical Forward Characteristics

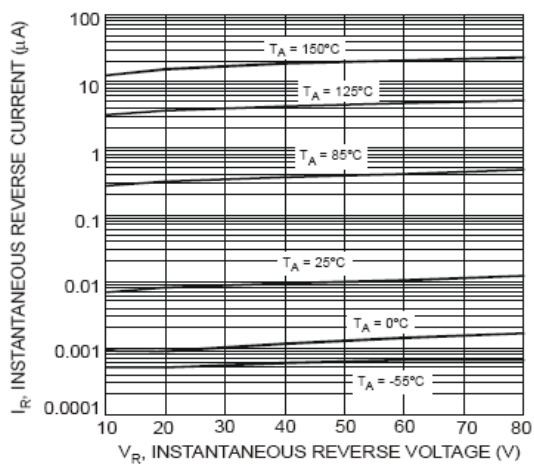


Fig. 3 Typical Reverse Characteristics

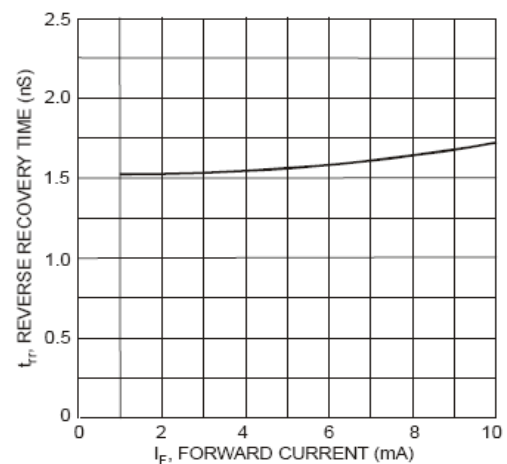


Fig. 4 Reverse Recovery Time vs. Forward Current

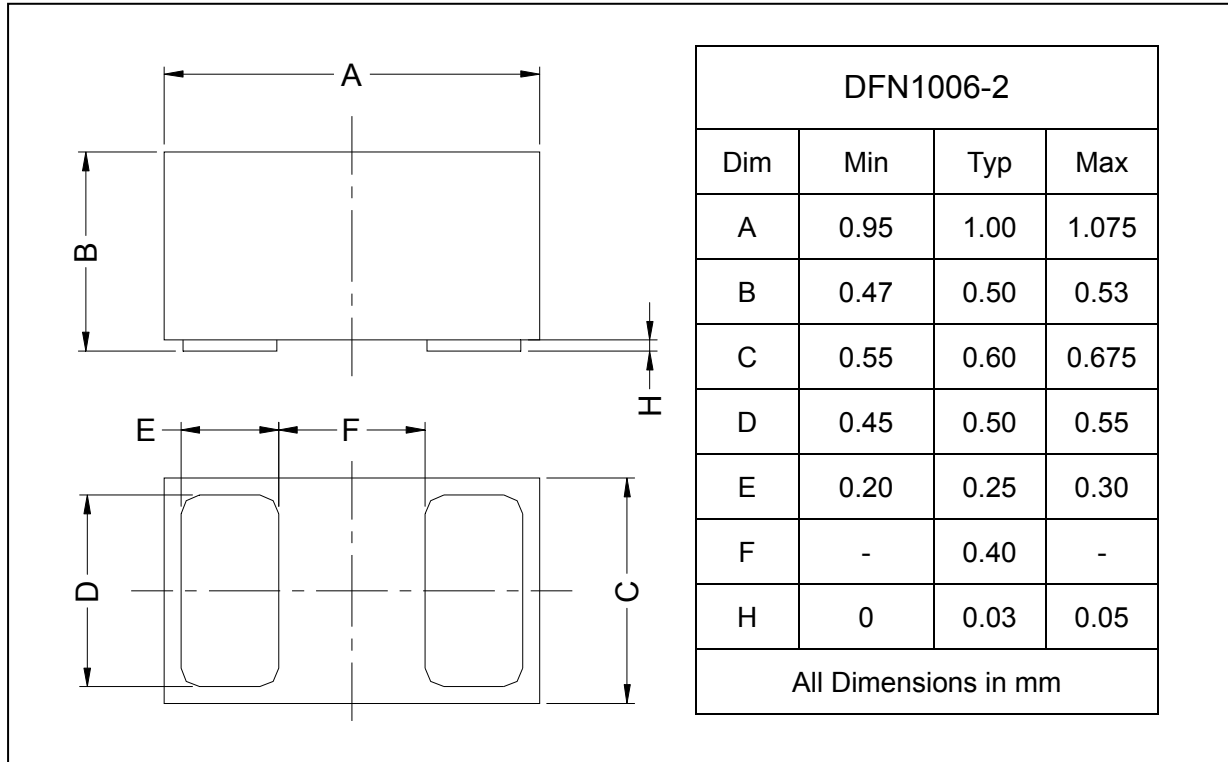
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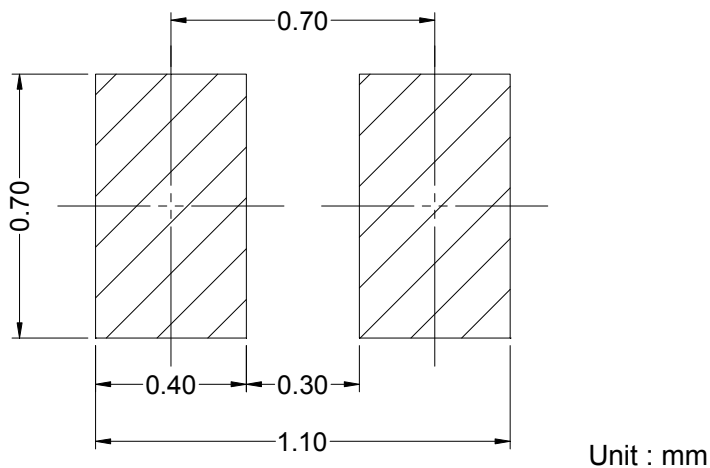
PACKAGE OUTLINE

Plastic surface mounted package

DFN1006-2



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
1N4448L	DFN1006-2	5000/Tape&Reel