

Silicon Epitaxial Planar Diode

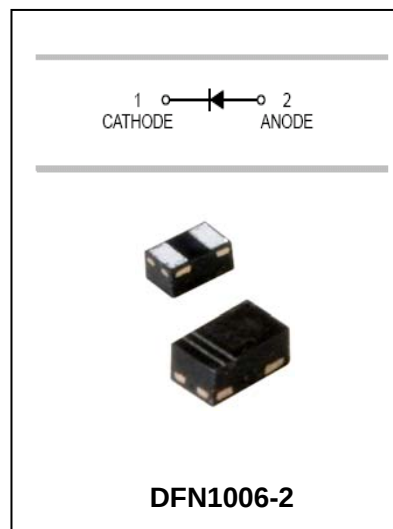
1N4148L

FEATURES

- Fast Switching Speed: $t_{rr}=4ns$ (Typ).
- Surface Mount Package Ideally Suited For Automatic Insertion.
- For General Purpose Switching Applications.
- High Conductance.
- Available in Lead Free Version.



Lead-free



APPLICATIONS

- Surface mount fast switching diode.

ORDERING INFORMATION

Type No.	Marking	Package Code
1N4148L	T4	DFN1006-2

MAXIMUM RATING @ $T_a=25^{\circ}C$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Reverse Voltage	V_{RRM} V_{RWM} V_R	75	V
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_o	150	mA
Non-Repetitive Peak Forward Surge Current @ $t=1.0 \mu s$ @ $t=1.0 s$	I_{FSM}	2.0 1.0	A
Power Dissipation	P_d	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	357	$^{\circ}C/W$
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150	$^{\circ}C$

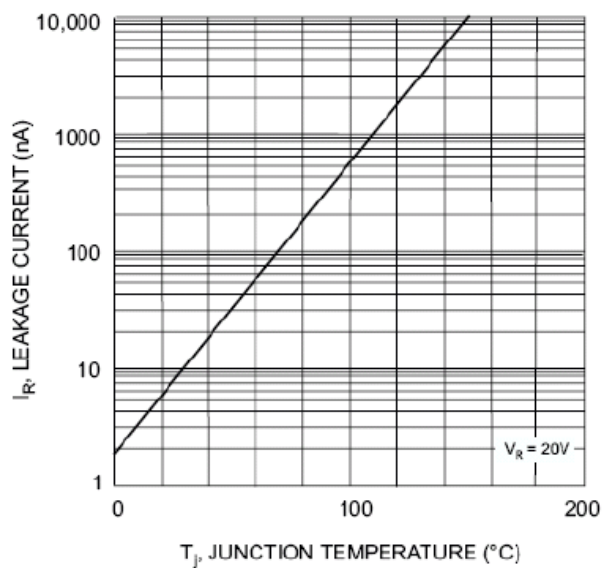
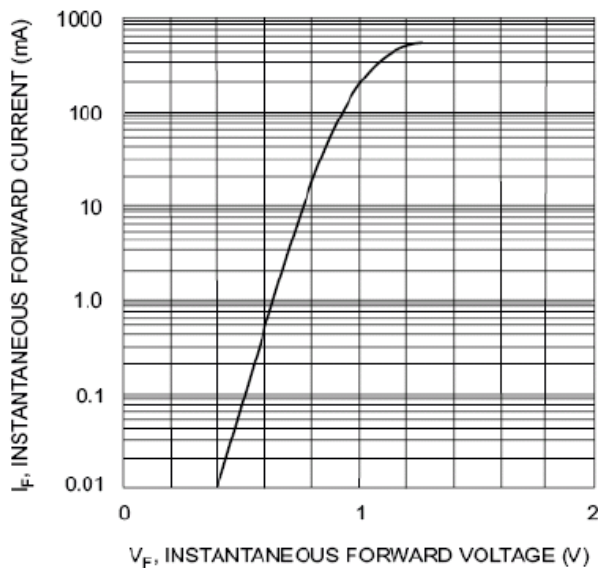
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ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Test Condition	Min	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R=10\mu A$	75	-	V
Forward Voltage	V_F	$I_F=1mA$ $I_F=10mA$ $I_F=50mA$ $I_F=150mA$		0.715 0.855 1.0 1.25	V
Reverse Current	I_R	$V_R=20V$ $V_R=75V$		25 1.0	nA μA
Junction Capacitance	C_J	$V_R=0, f=1.0MHz$		2.0	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=10mA$, $I_{rr}=0.1 \times I_R, R_L=100\Omega$	-	4.0	ns

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



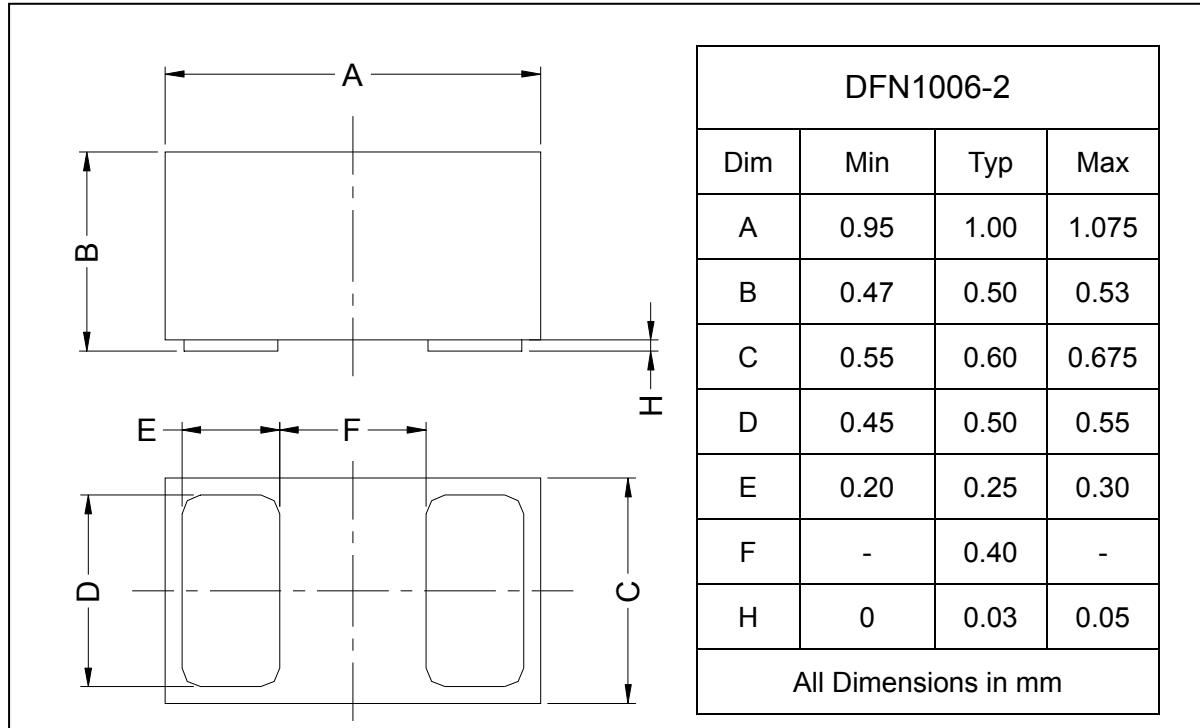
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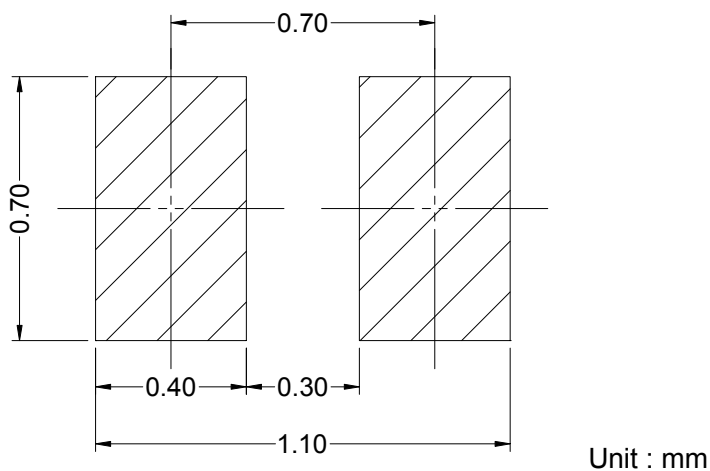
PACKAGE OUTLINE

Plastic surface mounted package

DFN1006-2



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
1N4148L	DFN1006-2	5000/Tape&Reel