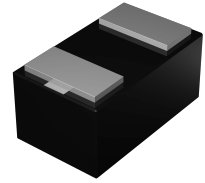


Features

- Low Turn-on Voltage
- Fast Switching
- Ultra-Small Surface Mount Package
- Lead Free/RoHS Compliant



Package: DFN1006-2



Schematic Diagram

Mechanical Data

- Case Material: Molded plastic, "Green" molding compound, compliant to UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Terminal Connections: Cathode Dot
- Terminals Finish - NiPdAu annealed over Copper lead frame solderable per MIL-STD-202, Method 208
- Weight: 0.001 grams (approximately)

Applications

- Mobile Handsets
- MP3 Players
- Digital Camera and Camcorders
- Notebook PCs & PDAs
- GPS



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

Symbol	Parameter	Value	Unit
V_{RRM}	Peak Repetitive Reverse Voltage	70	V
V_{RWM}	Working Peak Reverse Voltage		
V_R	DC Blocking Voltage		
I_{FM}	Forward Continuous Current (Note 1)	70	mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current @ $t < 1.0\text{s}$	800	mA

Thermal Characteristics

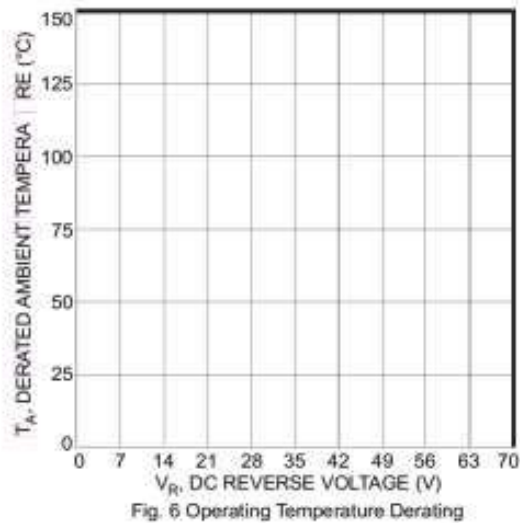
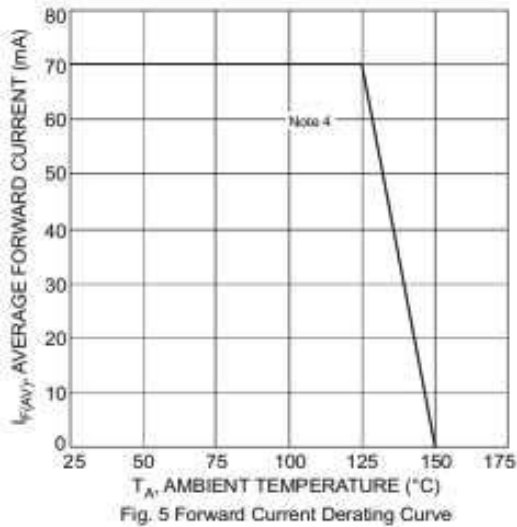
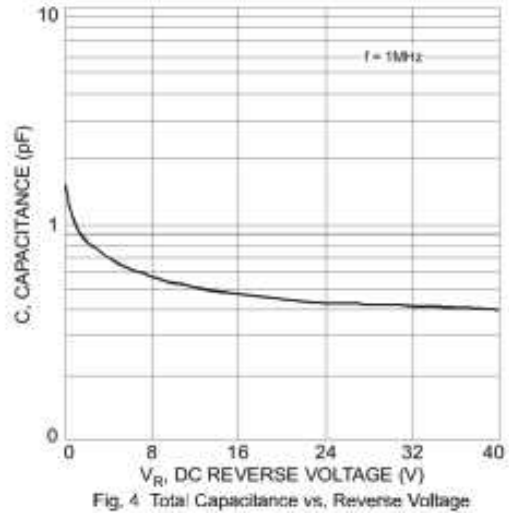
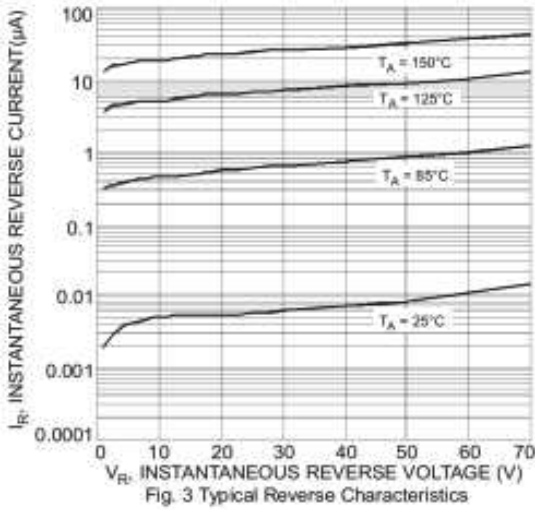
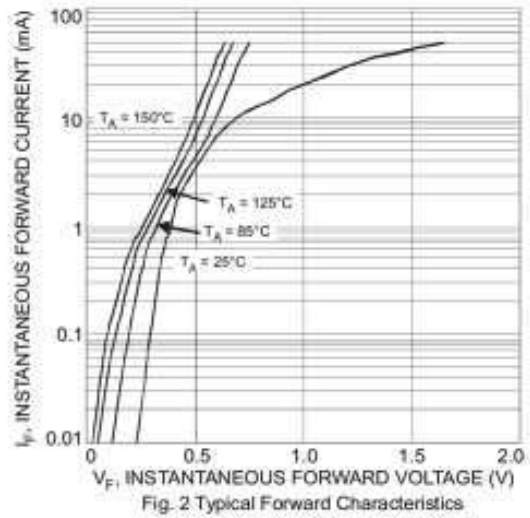
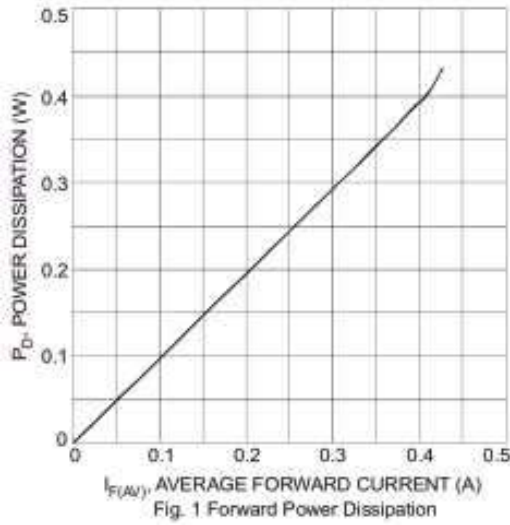
Symbol	Parameter	Value	Unit
P_D	Power Dissipation (Note 1)	430	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient Air (Note 1)	295	$^{\circ}\text{C}/\text{W}$
T_J	Operating Temperature Range	-55~+150	$^{\circ}\text{C}$
T_{STG}	Storage Temperature Range	-55~+150	$^{\circ}\text{C}$

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

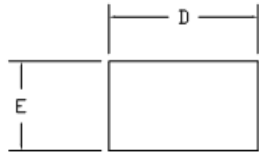
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse Breakdown Voltage (Note 2)	$V_{(BR)R}$	$I_R = 10\mu\text{A}$	70	-	-	V
Forward Voltage	V_F	$I_F = 1.0\text{mA}$ $I_F = 15\text{mA}$	-	-	400 960	mV
Reverse Leakage Current (Note 2)	I_R	$V_R = 50\text{V}$ $V_R = 70\text{V}$			0.04 2	μA
Total Capacitance	C_T	$V_R = 0\text{V}$, $f = 1.0\text{MHz}$		2.0		pF
Reverse Recovery Time	T_{rr}	$I_F=I_R=10\text{mA}$ $i_{rr}=0.1I_R$			5.0	nS

Notes: 1. Device mounted on FR-4 PC board with recommended pad layout.
2. Short duration pulse test used to minimize self-heating effect.

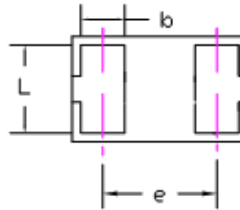
Electrical Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise specified)



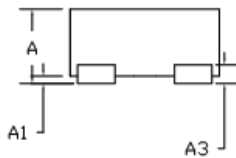
Package Outline Dimensions DFN1006-2 Package Outline (dimensions in mm)



TOP VIEW



BOTTOM VIEW

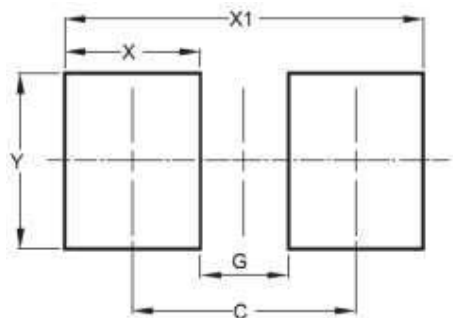


SIDE VIEW

COMMON DIMENSIONS (MM)			
PKG.	DFN1006-2L		
REF.	MIN.	NOM.	MAX.
A	>0.40	-	0.50
A1	0.00	-	0.05
A3	0.125REF		
D	0.95	1.00	1.05
E	0.55	0.60	0.65
b	0.20	0.25	0.30
L	0.45	0.50	0.55
e	0.65 BSC		

Lead finish: NiPdAu

Suggested Pad Layout



DIMENSIONS	VALUE (MM)
C	0.70
G	0.30
X	0.40
X1	1.10
Y	0.70