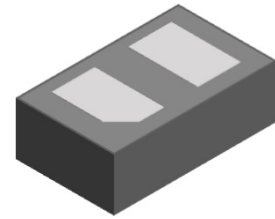
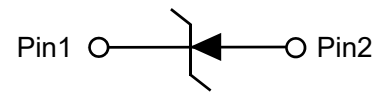


## Feature

- High Speed Switching
- Small Surface Mounting Type (DFN1006)
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode
- Weight: approx. 0.001g



DFN1006-2L(Bottom View)



Circuit Diagram

## Electrical characteristics ( $T_A=25^\circ\text{C}$ unless otherwise noted)

Rating	Symbol	Value	Units
Power Dissipation	$P_d$	200	mW
Storage Temperature Range	$T_{STG}$	-55~+150	$^\circ\text{C}$
Operating Junction Temperature	$T_J$	150	$^\circ\text{C}$

## Maximum Ratings and Thermal Characteristics ( $T_A=25^\circ\text{C}$ unless otherwise noted)

Device	Marking	$V_Z@I_{ZT}$			$I_{ZT}$	$Z_{ZT}@I_{ZT}$	$I_{ZK}$	$Z_{ZK}@I_{ZK}$	$I_R@V_R$	$V_R$
		V			mA	$\Omega$	mA	$\Omega$	$\mu\text{A}$	V
		Min	Nom	Max		Max		Max	Max	
PZ2FD2V0HK	$\pm 8$	1.95	2	2.05	5	100	1	564	120	0.5
PZ2FD2V2HK	$\perp 8$	2.14	2.2	2.26	5	100	1	564	120	0.7
PZ2FD2V4HK	08	2.35	2.4	2.45	5	100	1	564	45	1
PZ2FD2V7HK	18	2.65	2.7	2.75	5	100	1	564	18	1
PZ2FD3V0HK	28	2.94	3	3.06	5	100	1	564	9	1
PZ2FD3V3HK	38	3.23	3.3	3.37	5	95	1	564	4.5	1
PZ2FD3V6HK	48	3.53	3.6	3.67	5	90	1	564	4.5	1
PZ2FD3V9HK	+8	3.82	3.9	3.98	5	90	1	564	2.7	1
PZ2FD4V3HK	68	4.21	4.3	4.39	5	90	1	564	2.7	1
PZ2FD4V7HK	78	4.61	4.7	4.79	5	80	1	470	2.7	2
PZ2FD5V1HK	88	5	5.1	5.2	5	60	1	451	1.8	2
PZ2FD5V6HK	98	5.49	5.6	5.71	5	40	1	376	0.9	2
PZ2FD6V2HK	A8	6.08	6.2	6.32	5	10	1	141	2.7	4
PZ2FD6V8HK	B8	6.66	6.8	6.94	5	15	1	75	1.8	4
PZ2FD7V5HK	C8	7.35	7.5	7.65	5	15	1	75	0.9	5
PZ2FD8V2HK	D8	8.04	8.2	8.36	5	15	1	75	0.63	5

## Zener Voltage Regulators

Device	Marking	$V_Z @ I_{ZT}$			$I_{ZT}$	$Z_{ZT} @ I_{ZT}$	$I_{ZK}$	$Z_{ZK} @ I_{ZK}$	$I_R @ V_R$	$V_R$
		V			mA	$\Omega$	mA	$\Omega$	$\mu A$	V
		Min	Nom	Max		Max		Max	Max	
PZ2FD9V1HK	E8	8.92	9.1	9.28	5	15	1	94	0.45	6
PZ2FD10VHK	F8	9.8	10	10.2	5	20	1	141	0.18	7
PZ2FD11VHK	G8	10.78	11	11.22	5	20	1	141	0.09	8
PZ2FD12VHK	H8	11.76	12	12.24	5	25	1	141	0.09	8
PZ2FD13VHK	J8	12.74	13	13.26	5	30	1	160	0.09	8
PZ2FD15VHK	K8	14.7	15	15.3	5	30	1	188	0.045	10.5
PZ2FD16VHK	L8	15.68	16	16.32	5	40	1	188	0.045	11.2
PZ2FD18VHK	M8	17.64	18	18.36	5	45	1	212	0.045	12.6
PZ2FD20VHK	N8	19.6	20	20.4	5	55	1	212	0.045	14
PZ2FD22VHK	P8	21.56	22	22.44	5	55	1	235	0.045	15.4
PZ2FD24VHK	R8	23.52	24	24.48	5	70	1	235	0.045	16.8
PZ2FD27VHK	S8	26.46	27	27.54	2	80	0.5	282	0.045	18.9
PZ2FD30VHK	T8	29.4	30	30.6	2	80	0.5	282	0.045	21
PZ2FD33VHK	U8	32.34	33	33.66	2	80	0.5	306	0.045	23
PZ2FD36VHK	V8	35.28	36	36.72	2	90	0.5	329	0.045	25.2
PZ2FD39VHK	X8	38.22	39	39.78	2	130	0.5	329	0.045	27.3
PZ2FD43VHK	Y8	42.14	43	43.86	2	150	0.5	353	0.045	30.1
PZ2FD47VHK	Z8	46.06	47	47.94	2	170	0.5	353	0.045	33
PZ2FD51VHK	-8	49.98	51	52.02	2	180	0.5	376	0.045	35.7
PZ2FD56VHK	=8	54.88	56	57.12	2	200	0.5	400	0.045	39.2
PZ2FD62VHK	≡8	60.76	62	63.24	2	215	0.5	423	0.045	43.4
PZ2FD68VHK	>8	66.64	68	69.36	2	240	0.5	447	0.045	47.6
PZ2FD75VHK	<8	73.5	75	76.5	2	255	0.5	470	0.045	52.5

$V_F$  Forward Voltage=1V Maximum @  $I_F = 10mA$  for all types

1. The Zener Voltage ( $V_Z$ ) is tested under pulse condition of 10mS.
2. For detailed information on price, availability and delivery of nominal zener voltages between the voltages shown and tighter voltage tolerances, contact your nearest JESTEK representative.
3. The zener impedance is derived from the 60-cycle ac voltage, which results when an ac current having an rms value equal to 10% of the dc zener current ( $I_{ZT}$  or  $I_{ZK}$ ) is superimposed to  $I_{ZT}$  or  $I_{ZK}$ .

# Zener Voltage Regulators

## Typical Characteristics

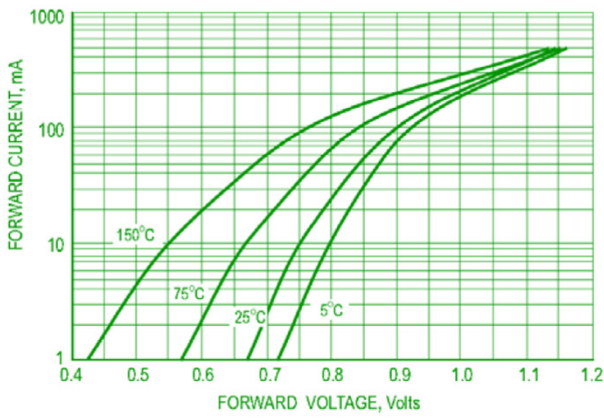


Fig.1 TYPICAL FORWARD VOLTAGE

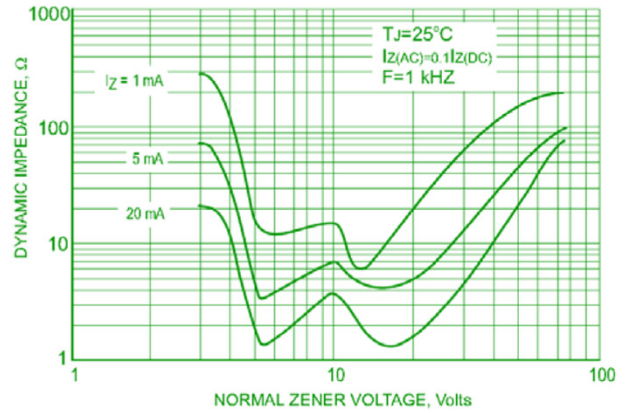


Fig.2 EFFECT OF ZENER VOLTAGE ON ZENER IMPEDANCE

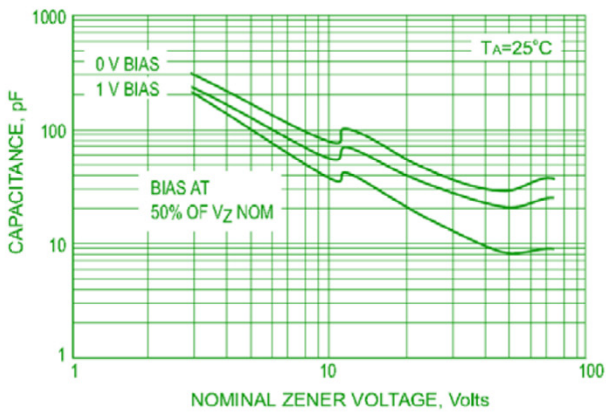


Fig.4 TYPICAL CAPACITANCE

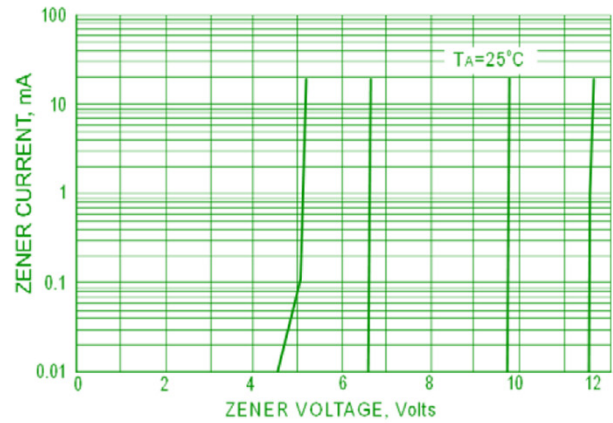


Fig.5 ZENER BREAKDOWN CHARACTERISTICS

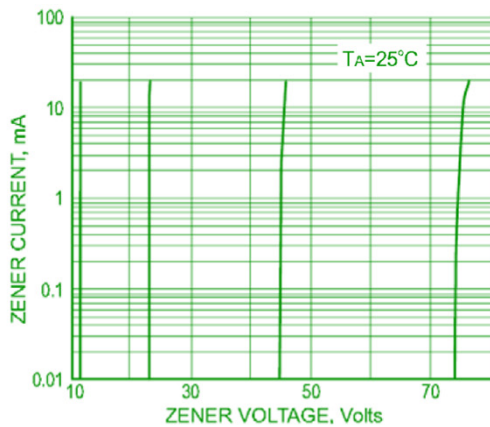


Fig.6 ZENER BREAKDOWN CHARACTERISTICS

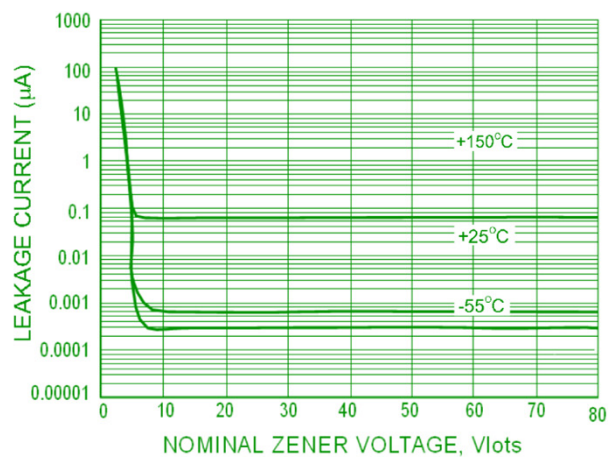
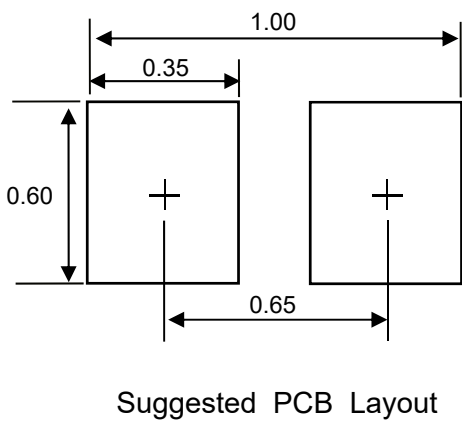
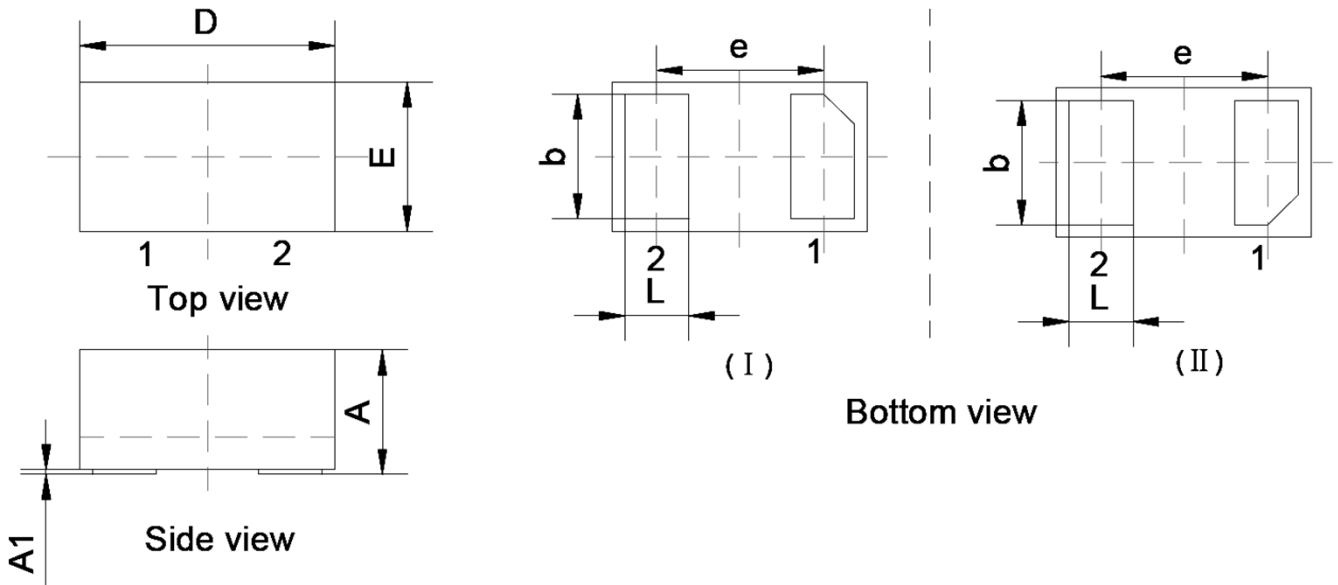


Fig.7 TYPICAL LEAKGE CURRENT

# Zener Voltage Regulators

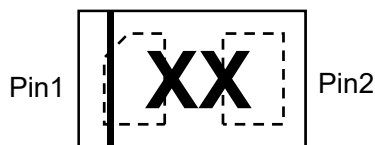
## Product Dimension (DFN1006-2L)



Unit: mm

Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	0.40	0.55	0.016	0.022
A1	0.00	0.05	0.000	0.002
b	0.45	0.55	0.018	0.022
D	0.95	1.05	0.037	0.041
e	0.65 BSC.		0.026 BSC.	
E	0.55	0.65	0.022	0.026
L	0.20	0.30	0.008	0.012

## Marking information



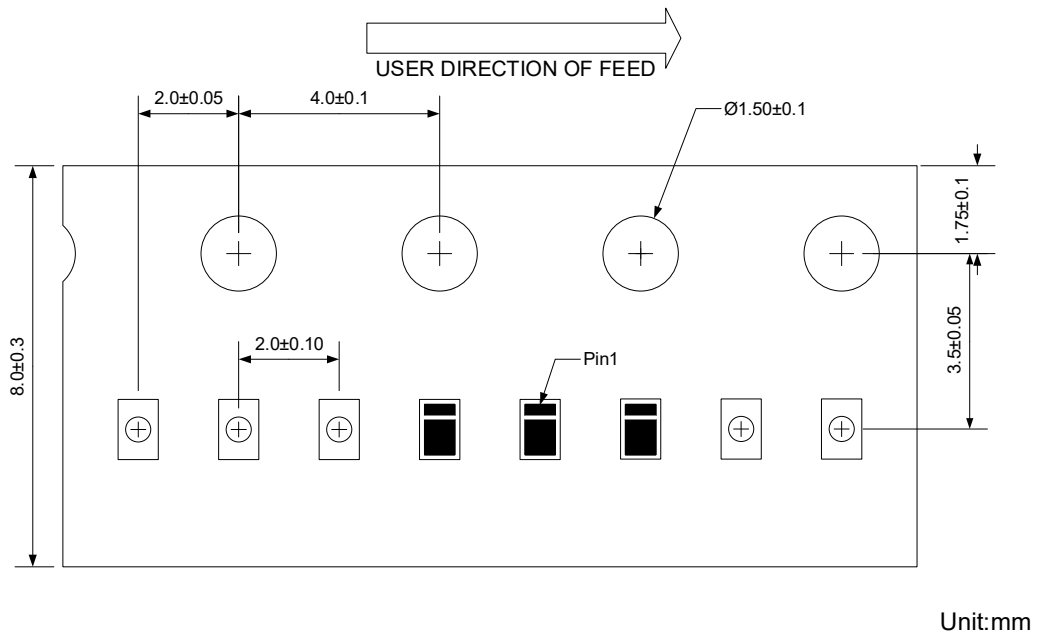
Note: Detailed Marking See table above

## Ordering information


Package	Reel	Shipping
DFN1006-2L	7"	10000 / Tape & Reel

# Zener Voltage Regulators

## Load with information




### IMPORTANT NOTICE

 and **Prisemi**<sup>®</sup> are registered trademarks of **Prisemi Electronics Co., Ltd** (Prisemi), Prisemi reserves the right to make changes without further notice to any products herein. Prisemi makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Prisemi assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. "Typical" parameters which may be provided in Prisemi data sheets and/or specifications can and do vary in different applications and actual performance may vary over time. All operating parameters, including "Typicals" must be validated for each customer application by customer's technical experts. Prisemi does not convey any license under its patent rights nor the rights of others. The products listed in this document are designed to be used with ordinary electronic equipment or devices, Should you intend to use these products with equipment or devices which require an extremely high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), please be sure to consult with our sales representative in advance.

Website: <http://www.prisemi.com>

For additional information, please contact your local Sales Representative.

©Copyright 2009, Prisemi Electronics

 **Prisemi**<sup>®</sup> is a registered trademark of Prisemi Electronics.

All rights are reserved.