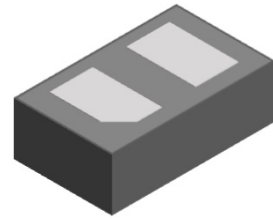
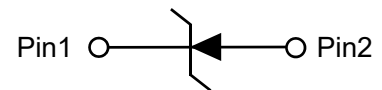


Feature

- Planar Die construction
- 250mW Power Dissipation
- Zener Voltages from 2.4V-75V
- RoHS Compliant
- Green EMC
- 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	250	mW
Maximum Forward Voltage @ $I_F=10\text{mA}$	V_F	0.9	V
Peak Forward Surge Current	I_{FSM}	2.0	A
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	417	$^\circ\text{C/W}$
Junction and Storage Temperature Range	T_J, T_{STG}	-55~+150	$^\circ\text{C}$

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

Device	Marking	$V_Z @ I_{ZT}^{1)}$			I_{ZT}	$Z_{ZT} @ I_{ZT}$	I_{ZK}	$Z_{ZK} @ I_{ZK}$	$I_R @ V_R$	V_R
		V			mA	Ω	mA	Ω	μA	V
		Min	Nom	Max		Max		Max	Max	
PZ2FD2V4HA	A1	2.4	2.35	2.45	5	100	1	400	50	1
PZ2FD2V7HA	A2	2.7	2.65	2.75	5	100	1	450	20	1
PZ2FD3V0HA	A3	3	2.94	3.06	5	95	1	500	10	1
PZ2FD3V3HA	A4	3.3	3.23	3.37	5	95	1	500	5	1
PZ2FD3V6HA	A5	3.6	3.53	3.67	5	90	1	500	5	1
PZ2FD3V9HA	A6	3.9	3.82	3.98	5	90	1	500	3	1
PZ2FD4V3HA	A7	4.3	4.21	4.39	5	90	1	600	3	1
PZ2FD4V7HA	A8	4.7	4.61	4.79	5	80	1	500	3	2
PZ2FD5V1HA	A9	5.1	5	5.2	5	60	1	480	2	2
PZ2FD5V6HA	AA	5.6	5.49	5.71	5	40	1	400	1	2
PZ2FD6V2HA	AB	6.2	6.08	6.32	5	10	1	150	3	4
PZ2FD6V8HA	AC	6.8	6.66	6.94	5	15	1	80	2	4
PZ2FD7V5HA	AD	7.5	7.35	7.65	5	15	1	80	1	5

Zener Voltage Regulators

Device	Marking	$V_Z @ I_{ZT}^{1)}$			I_{ZT}	$Z_{ZT} @ I_{ZT}$	I_{ZK}	$Z_{ZK} @ I_{ZK}$	$I_R @ V_R$	V_R
		V			mA	Ω	mA	Ω	μA	V
		Min	Nom	Max		Max		Max	Max	
PZ2FD8V2HA	AE	8.2	8.04	8.36	5	15	1	80	0.7	5
PZ2FD9V1HA	AF	9.1	8.92	9.28	5	15	1	100	0.5	6
PZ2FD10HA	AG	10	9.8	10.2	5	20	1	150	0.2	7
PZ2FD11HA	AH	11	10.78	11.22	5	20	1	150	0.1	8
PZ2FD12HA	AJ	12	11.76	12.24	5	25	1	150	0.1	8
PZ2FD13HA	AK	13	12.74	13.26	5	30	1	170	0.1	8
PZ2FD15HA	AL	15	14.7	15.3	5	30	1	200	0.05	10.5
PZ2FD16HA	C1	16	15.68	16.32	5	40	1	200	0.05	11.2
PZ2FD18HA	C2	18	17.64	18.36	5	45	1	225	0.05	12.6
PZ2FD20HA	C3	20	19.6	20.4	5	55	1	225	0.05	14
PZ2FD22HA	C4	22	21.56	22.44	5	55	1	250	0.05	15.4
PZ2FD24HA	C5	24	23.52	24.48	5	70	1	250	0.05	16.8
PZ2FD27HA	C6	27	26.46	27.54	2	80	0.5	300	0.05	18.9
PZ2FD30HA	C7	30	29.4	30.6	2	80	0.5	300	0.05	21
PZ2FD33HA	C8	33	32.34	33.66	2	80	0.5	325	0.05	23.1
PZ2FD36HA	C9	36	35.28	36.72	2	90	0.5	350	0.05	25.2
PZ2FD39HA	CA	39	38.22	39.78	2	130	0.5	350	0.05	27.3
PZ2FD43HA	CB	43	42.14	43.86	2	150	0.5	375	0.05	30.1
PZ2FD47HA	CC	47	45.83	48.17	2	170	0.5	375	0.05	32.9
PZ2FD51HA	CD	51	49.73	52.27	2	180	0.5	400	0.05	35.7
PZ2FD56HA	CE	56	54.6	57.4	2	200	0.5	425	0.05	39.2
PZ2FD62HA	CF	62	60.45	63.55	2	215	0.5	450	0.05	43.4
PZ2FD68HA	CG	68	66.3	69.7	2	240	0.5	475	0.05	47.6
PZ2FD75HA	CH	75	73.13	76.87	2	255	0.5	500	0.05	52.5

1. Pulse width = 10ms

Typical Characteristics

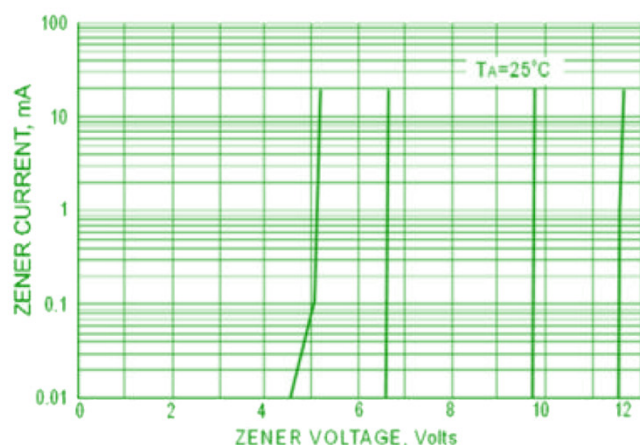


Fig. 1 - Zener Breakdown Characteristic

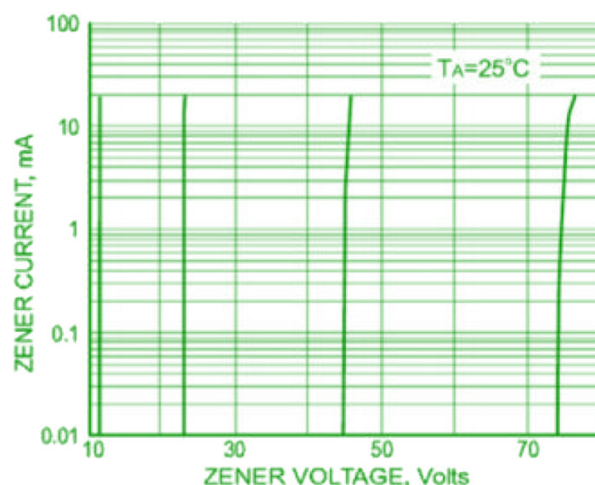


Fig. 2 - Zener Breakdown Characteristics

Zener Voltage Regulators

Typical Characteristics

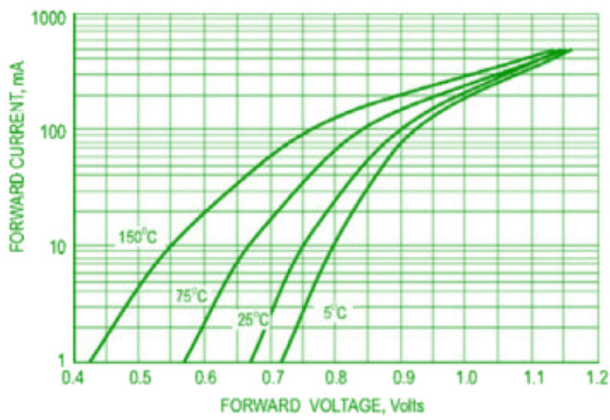


Fig. 3 - Forward Voltage

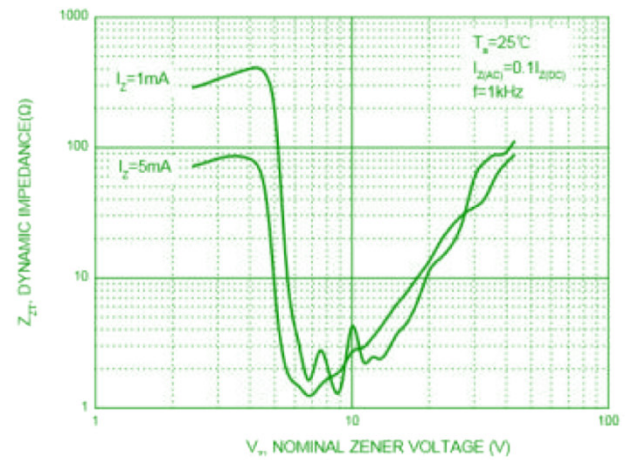


Fig. 4 - Effect of Zener Voltage on Zener Impedance

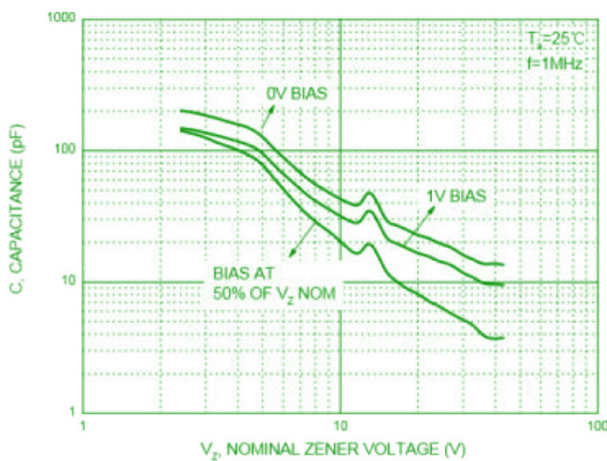


Fig. 5 - Typical Capacitance

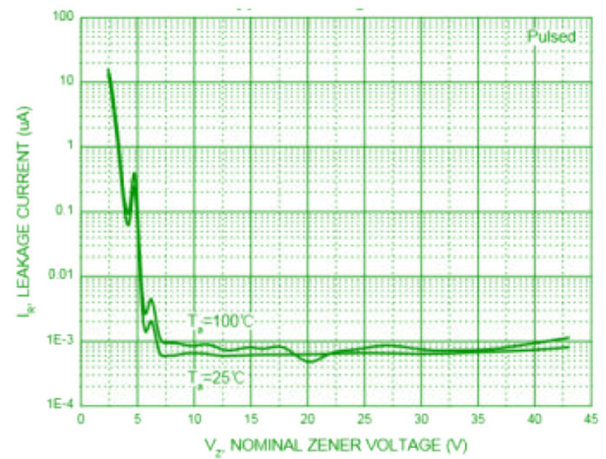


Fig. 6 - Typical Leakage Current

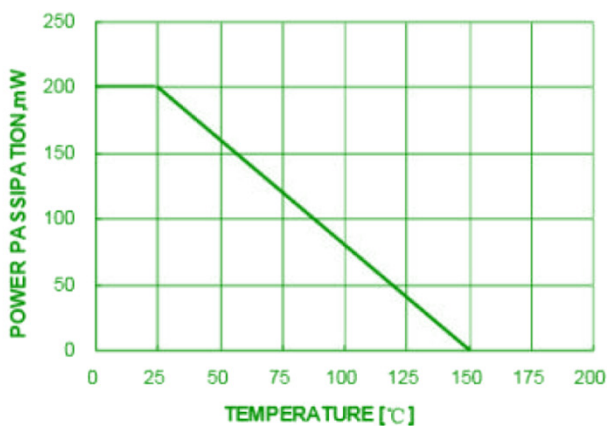
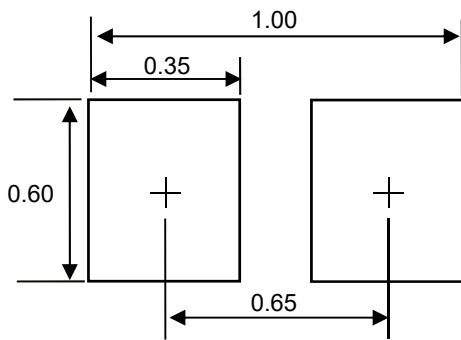
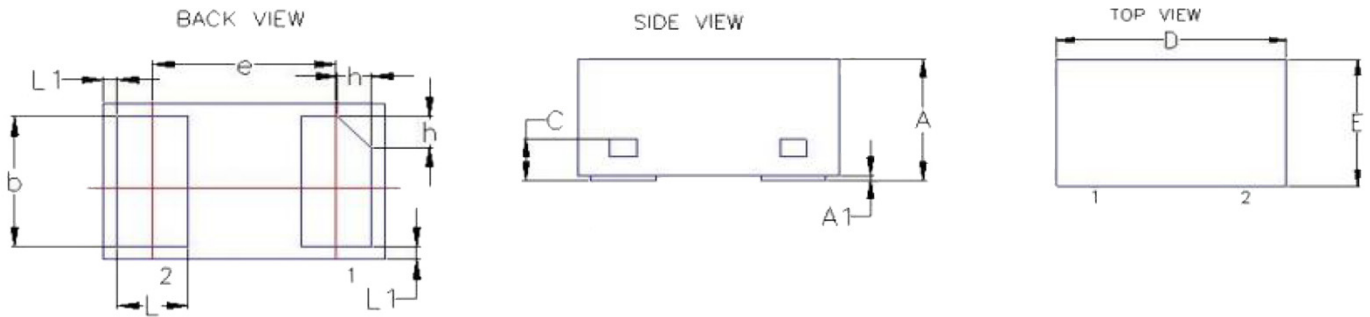


Fig. 7 - Power Dissipation vs. Ambient Temp.

Zener Voltage Regulators

Product Dimension (DFN1006-2L)

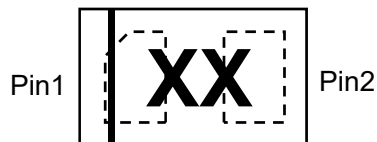


Suggested PCB Layout

Unit: mm

Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	0.45	0.55	0.018	0.022
A1	0.00	0.05	0.000	0.002
b	0.45	0.55	0.018	0.022
C	0.12	0.18	0.005	0.007
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
L1	0.05 Ref.		0.002 BSC.	
h	0.07	0.17	0.003	0.007

Marking information



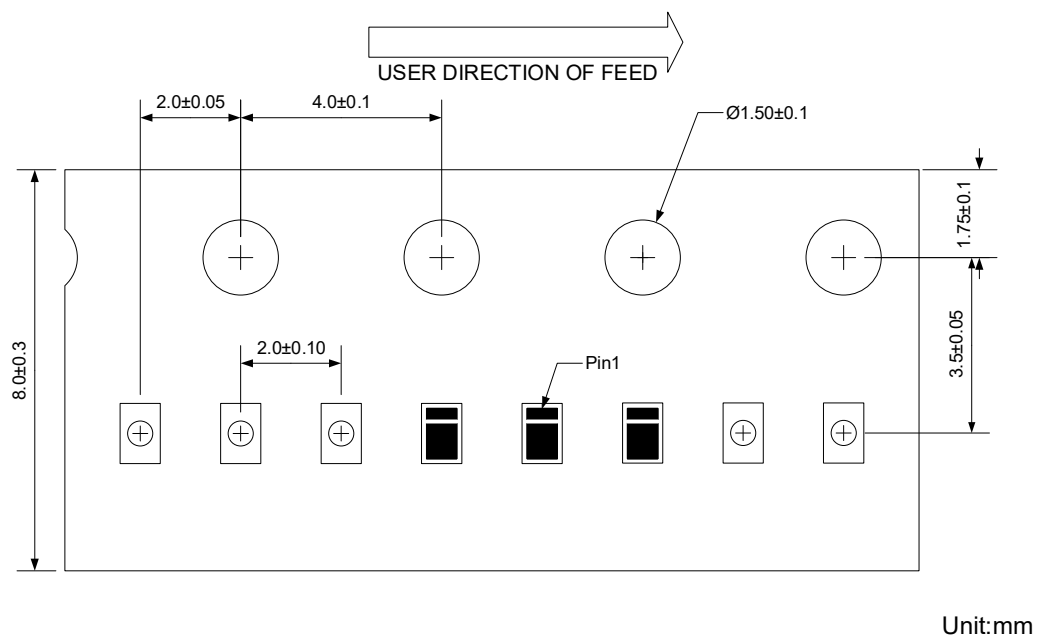
Note: Detailed Marking See table above

Ordering information

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

Zener Voltage Regulators

Load with information



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