5 WATT ZENER (GLASS CASE)
1N4954,1N5968, &1N5118 SERIES
G2 CASE

FEATURES:

- Voidless Subminiature Glass Package
- Metallurgically Bonded Dice Construction
- High Temperature Operation
- Designed for High Stress Environments

DESCRIPTION

Semicon's glass zener series features high temperature metallurgical bonds and a fused glass passivation /case construction. Small in physical size, they are designed for use in applications where electrical and environmental stress is severe.

Max. Surge Power
vs.
Surge Duration

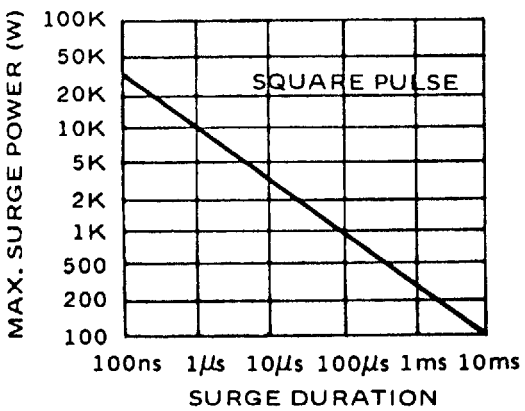

Fig.1

ABSOLUTE MAXIMUM RATINGS:

Zener Voltage (V_Z)	5.6 to 400 volts
Continuous Current	See reverse side
Surge Current (8.3ms)	See reverse side
Surge Power	See Fig. 1
Temperature Derating	See Fig. 2
Storage and Operating Temperature	-65°C to175°C

Power Dissipation
vs.
Lead Temperature Derating Curve

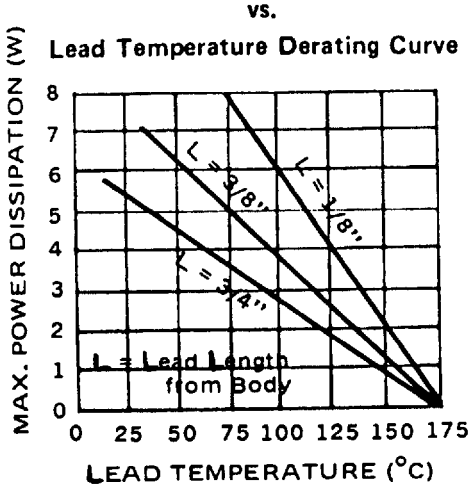

Fig. 2

Typical Zener Impedance
vs.
Zener Current

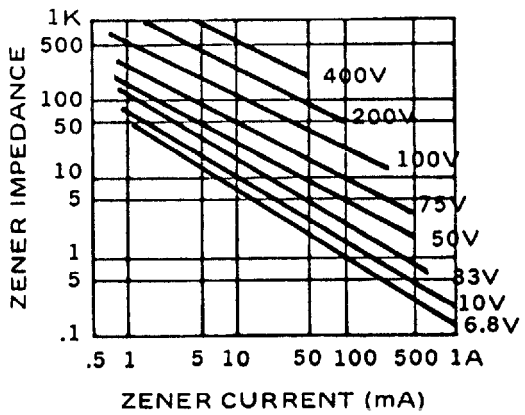

Fig. 3

ELECTRICAL CHARACTERISTICS TA = 25° C

Type	Nominal Zener Voltage V_Z @ I_{ZT}	Test Current I_{ZT}	Maximum Zener Impedance		Voltage Regulation ΔBV §§	Maximum Reverse Leakage Current			Maximum Temperature Coeff.	Maximum Continuous Current *	Maximum Surge Current †
			Z_Z @ I_{ZT}	Z_{ZK} @ I_{ZK} = 1mA		I_R††	I_R	V_R	T_C @ I_{ZT}	I_{ZM}	I_S
± 5% Tolerance	Volts	mA	Ohms	Ohms	Volts	μA		Volts	% / °C	mA	Amps
1N5968	5.6	220	1.0	400	0.4	5000	5000	4.28	.04	865	20
1N5969	6.2	220	1.0	1000	0.5	1000	1000	4.74	.04	765	20
1N4954*	6.8	175	1.0	1000	0.7	150	300	5.2	.05	700	40
1N4955*	7.5	175	1.5	800	0.7	100	200	5.7	.06	630	32
1N4956*	8.2	150	1.5	600	0.7	50	100	6.2	.06	580	24
1N4957*	9.1	150	2.0	400	0.7	25	50	6.9	.06	520	22
1N4958*	10.0	125	2.0	125	0.8	25	25	7.6	.07	475	20
1N4959*	11	125	2.5	130	0.8	10	15	8.4	.07	430	19
1N4960*	12	100	2.5	140	0.8	10	10	9.1	.07	395	18
1N4961*	13	100	3.0	145	0.8	10	10	9.9	.08	365	16
1N5118*	14	100	3.0				20	10.6	.08	320	14
1N4962*	15	75	3.5	150	1.0	5	5	11.4	.08	315	12
1N4963*	16	75	3.5	155	1.1	5	5	12.2	.08	294	10
1N4964*	18	65	4.0	160	1.2	5	5	13.7	.085	264	9.0
1N4965*	20	65	4.5	165	1.5	2	2	15.2	.085	237	8.0
1N4966*	22	50	5.0	170	1.8	2	2	16.7	.085	216	7.0
1N4967*	24	50	5.0	175	2.0	2	2	18.2	.090	198	6.5
1N4968*	27	50	6.0	180	2.0	2	2	20.6	.090	176	6.0
1N4969*	30	40	8	190	2.5	2	2	22.8	.090	158	5.5
1N4970*	33	40	10	200	2.8	2	2	25.1	.095	144	5.0
1N4971*	36	30	11	220	3.0	2	2	27.4	.095	132	4.5
1N4972*	39	30	14	230	3.0	2	2	29.7	.095	122	4.0
1N5119*	40	30	14				5	30.4	.095	105	4.0
1N4973*	43	30	20	240	3.3	2	2	32.7	.095	110	3.5
1N5120*	45	30	20				5	34.2	.095	95	3.5
1N4974*	47	25	25	250	3.5	2	2	35.8	.095	100	3.2
1N5121*	50	25	25				5	38	.095	85	3.0
1N4975*	51	25	27	270	4.0	2	2	38.8	.095	92	3.0
1N4976*	56	20	35	320	4.4	2	2	42.6	.095	84	2.8
1N5122*	60	20	40				5	45.7	.10	75	2.5
1N4977*	62	20	42	400	5.0	2	2	47.1	.100	76	2.5
1N4978*	68	20	50	500	5.5	2	2	51.7	.100	70	2.2
1N5123*	70	20	50				5	53.3	.10	65	2.3
1N4979*	75	20	55	620	6.0	2	2	56.0	.100	63	2.0
1N5124*	80	15	80				5	60.8	.10	55	1.8
1N4980*	82	15	80	720	6.6	2	2	62.2	.100	58.0	1.8
1N5125*	90	15	90				5	68.5	.10	50	1.6
1N4981*	91	15	90	760	7.5	2	2	69.2	.100	52.5	1.6
1N4982*	100	12	110	800	8.0	2	2	76.0	.100	47.5	1.4
1N4983*	110	12	125	1000	9.0	2	2	83.6	.100	43.0	1.2
1N4984*	120	10	170	1150	10	2	2	91.2	.100	39.5	1.00
1N4985*	130	10	190	1250	11	2	2	98.8	.105	36.6	0.80
1N5126*	140	8	230				5	106	.105	33	0.80
1N4986*	150	8	330	1500	13	2	2	114	.105	31.6	0.75
1N4987*	160	8	350	1650	14	2	2	121.6	.105	29.4	0.70
1N5127*	170	8	380				2	129	.105	27	0.65
1N4988*	180	5	450	1750	16	2	2	136.8	.110	26.4	0.60
1N5128*	190	5	470				5	144	.100	24	0.55
1N4989*	200	5	500	1850	18	2	2	152	.100	23.6	0.50
1N4990*	220	5	550	2000	19	2	2	167	.115	21.6	0.50
1N4991*	240	5	650	2050	22	2	2	182	.115	19.8	0.40
1N5129*	260	5	750				5	198	.120	17	0.35
1N4992*	270	5	800	2100	25	2	2	206	.120	17.5	0.35
1N5130*	280	4	850				5	213	.120	16	0.30
1N4993*	300	4	950	2150	28	2	2	228	.120	15.6	0.30
1N5131*	320	4	1100				5	243	.120	14	0.24
1N4994*	330	4	1175	2200	32	2	2	251	.120	14.4	0.25
1N5132*	340	4	1200				5	258	.120	13	0.23
1N4995*	360	3	1400	2300	35	2	2	274	.120	13	0.22
1N5134*	380	3	1500				5	289	.120	12	0.21
1N4996*	390	3	1800	2500	40	2	2	297	.120	12	0.20
1N5135*	400	3	1800				5	304	.120	11	0.20

§§ ΔBV is obtained by measuring the voltage change when the test current is changed from 10% to 50% of I_Z max under DC conditions. During this measurement leads are heat sunk .375 inch from the body and maintained at 25°C

* Maximum current is based on 5 Watt Rating. See lead temperature derating curves for proper mounting methods.

† Figures shown are for peak sinusoidal surge current of 8.3 msec duration, non-repetitive. The 8.3 ms square pulse rating is 70% of the value shown.

†† Specifications for JAN, JAN TX and TXV only.

Available in JAN, JAN TX and JAN TXV