

1N5926B THRU 1N5956B

1.5 Watt Zener Diode 11 to 200 Volts

Features

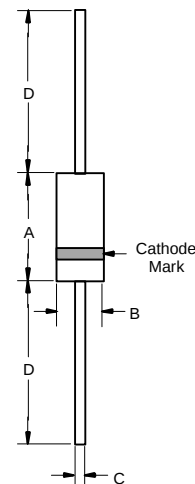
- Glass Passivated Junction
- Low Profile Package
- Low Inductance
- Built-in Strain Relief

Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Forward Voltage at $I_F=200\text{mA}$	V_F	1.5	V
Power Dissipation at $T_L = 75^\circ\text{C}$	P_{tot}	$1.5^{(1)}$	W
Pwak forward Surge Current 8.3ms single half sine/square wave	I_{FSM}	10	Amps
Junction Temperature	T_j	$-55 \sim +150$	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	$-55 \sim +150$	$^\circ\text{C}$

DO-41G



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.166	0.205	4.10	7.60	
B	0.080	0.107	2.00	3.60	Diameter
C	0.026	0.034	0.70	0.90	Diameter
D	1.000	-----	25.40	-----	



CHANGZHOU GUANGDA ELECTRONIC CO. LTD

Dated : 12/06/2009

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ELECTRICAL CHARACTERISTICS @30°C

MCC PART NUMBER	ZENER VOLTAGE V_Z	TEST CURRENT I_{ZT}	MAXIMUM DYNAMIC IMPEDANCE Z_{ZT} @ I_{ZT}	KNEE CURRENT I_{ZK}	KNEE IMPEDANCE Z_{ZK}	MAXIMUM REVERSE CURRENT I_R	REVERSE VOLTAGE V_R	MAXIMUM DC CURRENT I_{ZM}
	VOLTS	mA	OHMS	mA	OHMS	μA	VOLTS	mA
1N5926B	11	34.1	5.5	0.25	550	1.0	8.4	136
1N5927B	12	31.2	6.5	0.25	550	1.0	9.1	125
1N5928B	13	28.8	7.0	0.25	550	1.0	9.9	115
1N5929B	15	25	9.0	0.25	600	1.0	11.4	100
1N5930B	16	23.4	10	0.25	600	1.0	12.2	93
1N5931B	18	20.8	12	0.25	650	1.0	13.7	83
1N5932B	20	18.7	14	0.25	650	1.0	15.2	75
1N5933B	22	17	17.5	0.25	650	1.0	16.7	68
1N5934B	24	15.6	19	0.25	700	1.0	18.2	62
1N5935B	27	13.9	23	0.25	700	1.0	20.6	55
1N5936B	30	12.5	28	0.25	750	1.0	22.8	50
1N5937B	33	11.4	33	0.25	800	1.0	25.1	45
1N5938B	36	10.4	38	0.25	850	1.0	27.4	41
1N5939B	39	9.6	45	0.25	900	1.0	29.7	38
1N5940B	43	8.7	53	0.25	950	1.0	32.7	34
1N5941B	47	8.0	67	0.25	1000	1.0	35.8	31
1N5942B	51	7.3	70	0.25	1100	1.0	38.8	29
1N5943B	56	6.7	86	0.25	1300	1.0	42.6	26
1N5944B	62	6.0	100	0.25	1500	1.0	47.1	24
1N5945B	68	5.5	120	0.25	1700	1.0	51.2	22
1N5946B	75	5.0	140	0.25	2000	1.0	56	20
1N5947B	82	4.6	160	0.25	2500	1.0	62.2	18
1N5948B	91	4.1	200	0.25	3000	1.0	69.2	16
1N5949B	100	3.7	250	0.25	3100	1.0	76	15
1N5950B	110	3.4	300	0.25	4000	1.0	83.6	13
1N5951B	120	3.1	380	0.25	4500	1.0	91.2	12
1N5952B	130	2.9	450	0.25	5000	1.0	98.8	11
1N5953B	150	2.5	600	0.25	6000	1.0	114	10
1N5954B	160	2.3	700	0.25	6500	1.0	121.6	9.0
1N5955B	180	2.1	900	0.25	7000	1.0	136.8	8.0
1N5956B	200	1.9	1200	0.25	8000	1.0	152	7.0

* TOLERANCE AND VOLTAGE DESIGNATION Tolerance designation - The type numbers listed indicate a tolerance of $\pm 5\%$



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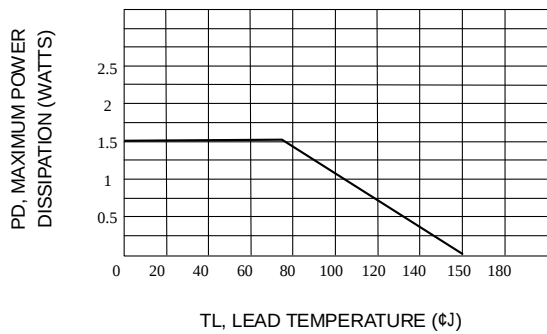


Fig. 1-STEADY STATE POWER DERATING

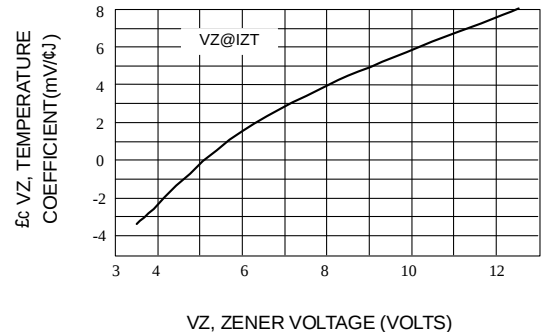


Fig. 2-ZENER VOLTAGE-TO 12 VOLTS

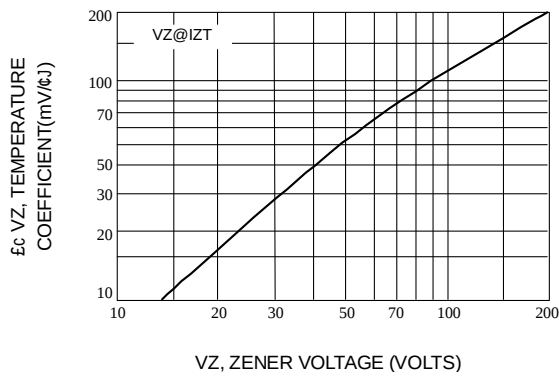


Fig. 3-ZENER VOLTAGE-10 TO 200 VOLTS

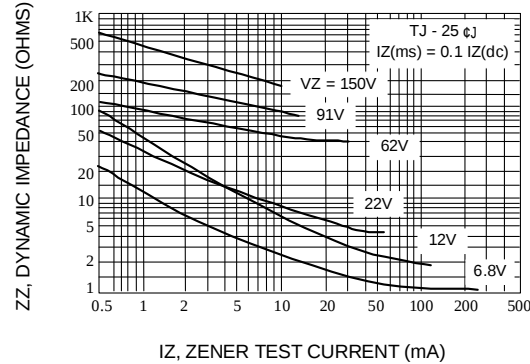


Fig. 4-EFFECT OF ZENER CURRENT

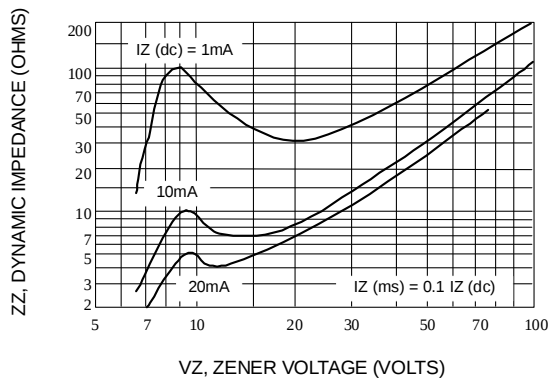


Fig. 5 Effect of Zener Voltage

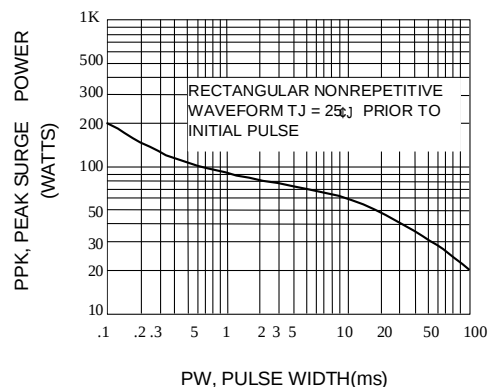


Fig. 6 Maximum Surge Power



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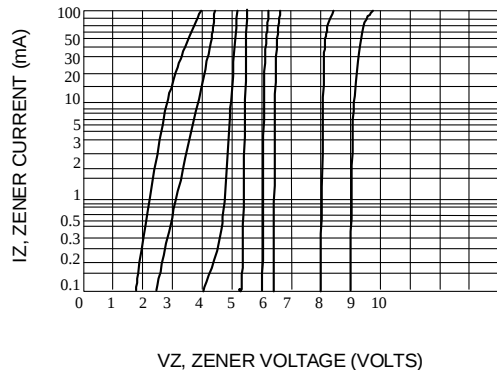


Fig. 7- $V_Z = 6.8$ THRU 10 VOLTS

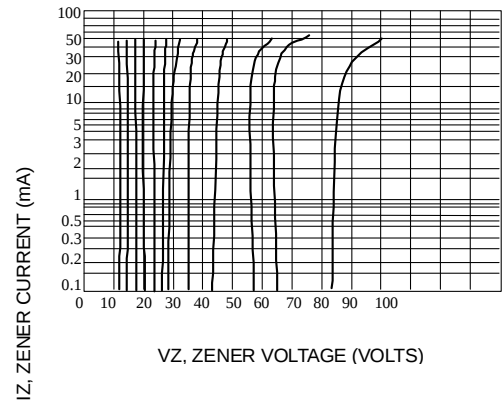


Fig. 8- $V_Z = 12$ THRU 82 VOLTS

NOTES:

1. Mounted on 5.0mm^2 (.013mm thick) land areas.
2. Measured on 8.3ms, single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum.
3. ZENER VOLTAGE (V_Z) MEASUREMENT Nominal zener voltage is measured with the device function in thermal equilibrium with ambient temperature at 25°C .
4. ZENER IMPEDANCE (Z_Z) DERIVATION Z_{ZT} are measured by dividing the ac voltage drop across the device by the current applied. The specified limits are for $I_{Z(ac)} = 0.1 I_Z$, (dc) with the ac frequency = 60Hz.



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