

1N5921B-G~1N5942B-G

SILICON ZENER DIODES

VOLTAGE 6.8 to 51 Volt **POWER** 1.5 Watt

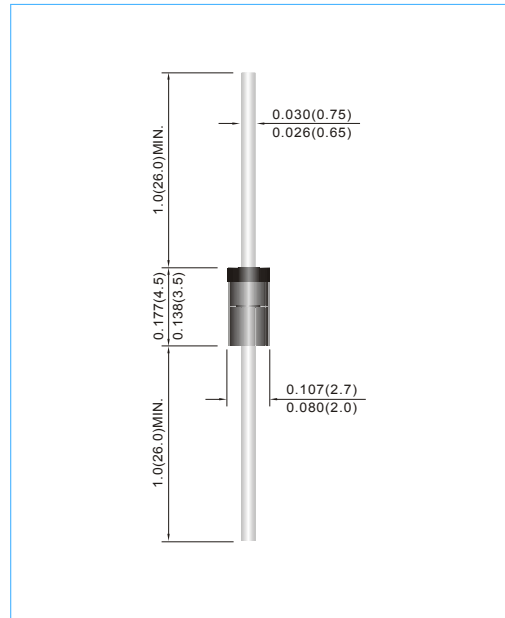
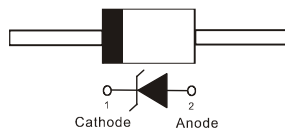
DO-41G Unit: inch(mm)

FEATURES

- Low inductance
- High temperature soldering : 260°C /10 seconds at terminals
- Glass package has Underwriters Laboratory Flammability Classification
- Lead free in compliance with EU RoHS 2011/65/EU directive

MECHANICAL DATA

- Case: Molded Glass DO-41G
- Terminals: Axial leads, solderable per MIL-STD-750, Method 2026



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Units
Power Dissipation at TA= 25 °C	P _{TOT}	1.5	W
Junction Temperature	T _J	-65 to +200	°C
Storage Temperature Range	T _{STG}	-65 to +200	°C

*Valid provided that leads at a distance of 10mm from case are kept at ambient temperature.

Parameter	Symbol	Min.	Typ.	Max.	Units
Thermal Resistance Junction to Ambient Air	R _{θJA}	--	--	170*	°C/W
Forward Voltage at I _F = 200mA	V _F	--	--	1.2	V

*Valid provided that leads at a distance of 10mm from case are kept at ambient temperature.

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Part Number	Nominal Zener Voltage			Maximum Zener Impedance				Maximum Leakage Current	
	V _Z @ I _{ZT}			Z _{VT} @ I _{ZT}		Z _{VK} @ I _{ZK}		I _R	V _R
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V
1N5921B-G	6.8	6.46	7.14	3	55.1	200	1	5	5.2
1N5922B-G	7.5	7.13	7.88	3	50	400	0.5	5	6
1N5923B-G	8.2	7.79	8.61	4	45.7	400	0.5	5	6.5
1N5924B-G	9.1	8.65	9.56	4	41.2	500	0.5	5	7
1N5925B-G	10	9.5	10.5	5	37.5	500	0.25	5	8
1N5926B-G	11	10.45	11.55	6	34.1	550	0.25	1	8.4
1N5927B-G	12	11.4	12.6	7	31.2	550	0.25	1	9.1
1N5928B-G	13	12.35	13.65	7	28.8	550	0.25	1	9.9
1N5929B-G	15	14.25	15.75	9	25	600	0.25	1	11.4
1N5930B-G	16	15.2	16.8	10	23.4	600	0.25	1	12.2
1N5931B-G	18	17.1	18.9	12	20.8	650	0.25	1	13.7
1N5932B-G	20	19	21	14	18.7	650	0.25	1	15.2
1N5933B-G	22	20.9	23.1	18	17	650	0.25	1	16.7
1N5934B-G	24	22.8	25.2	19	15.6	700	0.25	1	18.2
1N5935B-G	27	25.65	28.35	23	13.9	700	0.25	1	20.6
1N5936B-G	30	28.5	31.5	26	12.5	750	0.25	1	22.8
1N5937B-G	33	31.35	34.65	33	11.4	800	0.25	1	25.1
1N5938B-G	36	34.2	37.8	38	10.4	850	0.25	1	27.4
1N5939B-G	39	37.05	40.95	45	9.6	900	0.25	1	29.7
1N5940B-G	43	40.85	45.15	53	8.7	950	0.25	1	32.7
1N5941B-G	47	44.65	49.35	67	8	1000	0.25	1	35.8
1N5942B-G	51	48.45	53.55	70	7.3	1100	0.25	1	38.8

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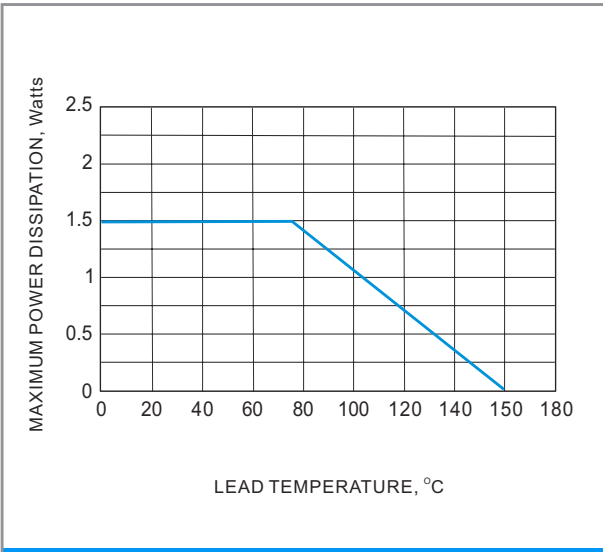


Fig.1 Steady State Power Derating

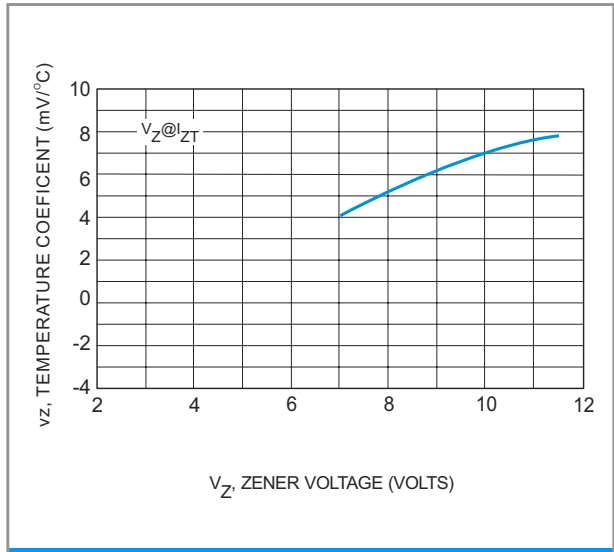


Fig.2 Temperature coefficient v.s. zener voltage, Vz(V)

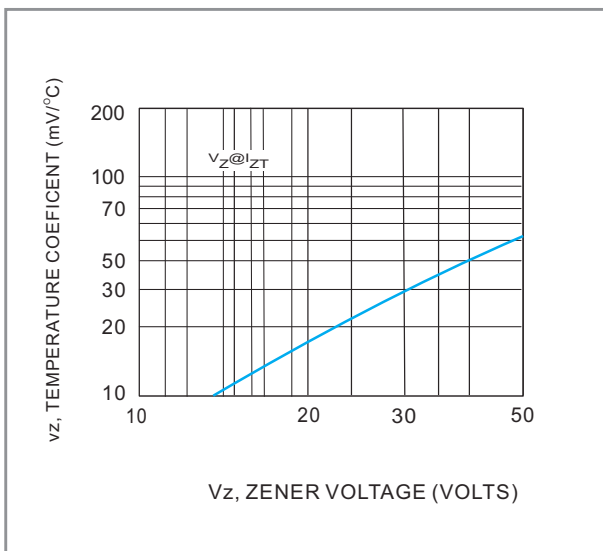


Fig.3 Temperature coefficient v.s. zener voltage, Vz(V)

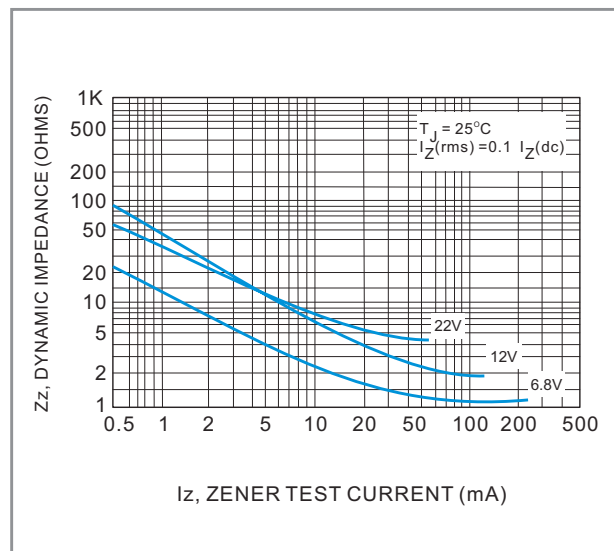


Fig.4 Zener impedance v.s. zener current

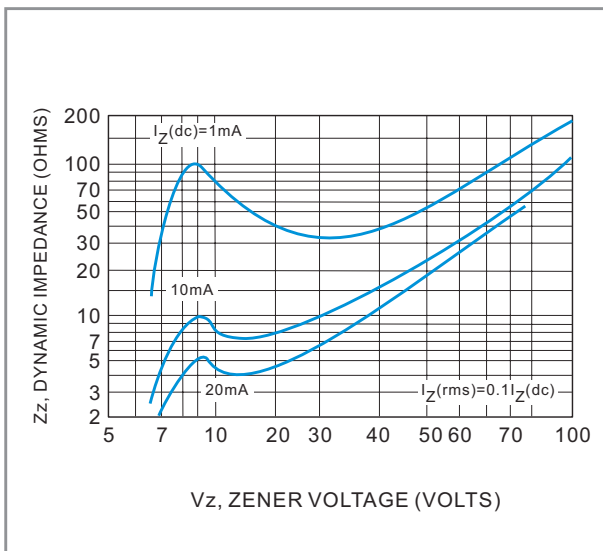


Fig.5 Zener impedance v.s. zener voltage

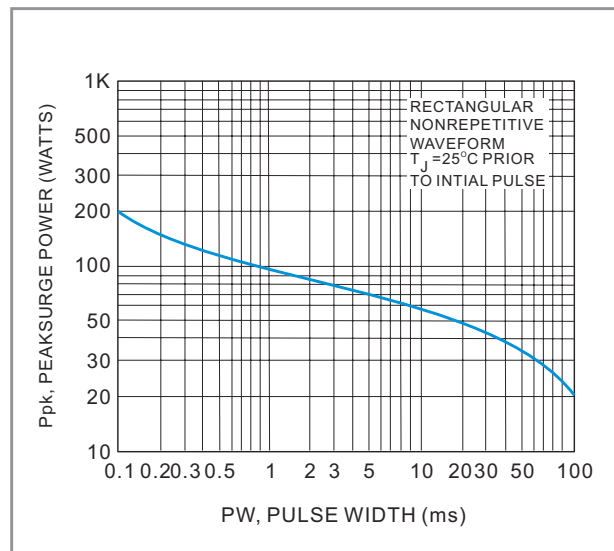
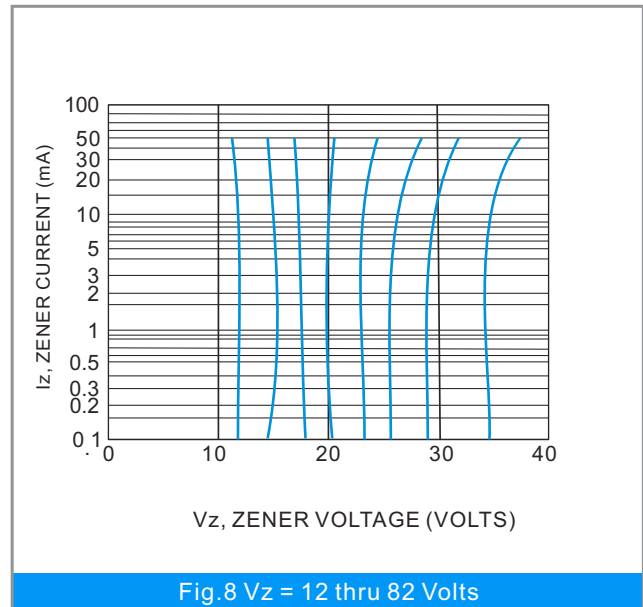
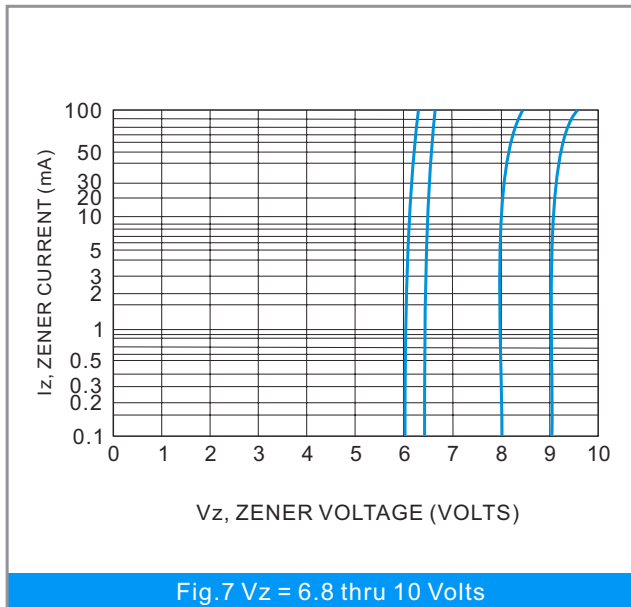


Fig.6 Maximum Surge Power

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NOTE 3. ZENER VOLTAGE (V_z) MEASUREMENT

Nominal zener voltage is measured with the device function in thermal equilibrium with ambient temperature at 25°C

NOTE 4. ZENER IMPEDANCE (Z_z) DERIVATION

Z_{zt} and Z_{zk} are measured by dividing the ac voltage drop across the device by the ac current applied. The specified limits are for $I_z(ac) = 0.1 I_z(dc)$ with the ac frequency = 60Hz

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Part No_packing code_Version

1N5921B-G_AY_10001

1N5921B-G_AX_10001

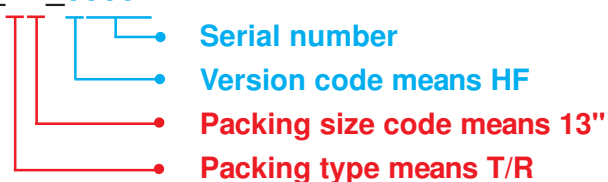
1N5921B-G_B0_10001

1N5921B-G_R2_10001

For example :

RB500V-40_R2_00001

Part No.



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

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