



3EZ6.2D5~3EZ200D5

ZENER 3W SERIES

3EZ Series

V_Z : 6.2 - 200 Volts

P_D : 3 Watt

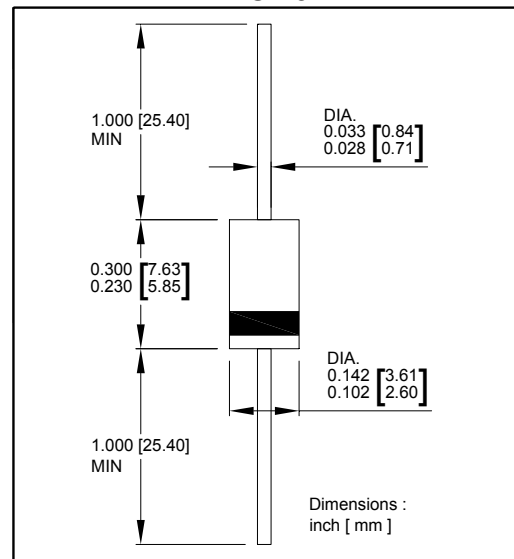
FEATURES

- Glass passivated chip
- Low leakage
- Built-in strain relief
- Low inductance
- High peak reverse power dissipation
- Lead (Pb)-free component
- For use in stabilizing and clipping circuits with high power rating

MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any

DO-15



RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	UNIT
DC Power Dissipation at $T_L = 50^\circ\text{C}$ (Note1)	P_D	3	Watts
Peak pulse current with a 10/1000 μs waveform	V_F	1.2	Volts
Junction Temperature Range	T_J	- 55 to + 150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 55 to + 175	$^\circ\text{C}$

Note:

(1) T_L = Lead temperature at 3/8 " (9.5mm) from body.



3EZ Series

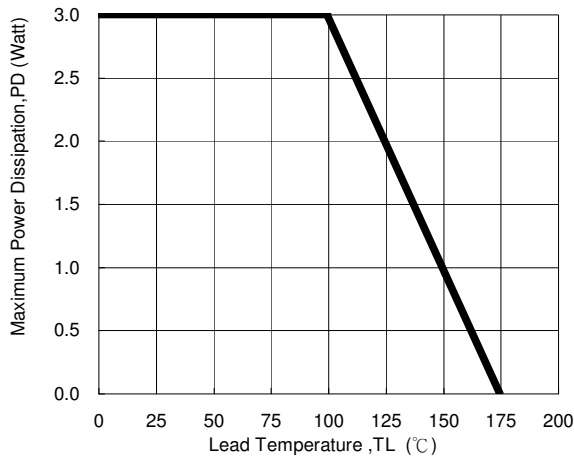


Fig. 1 - Power Temperature Derating Curve

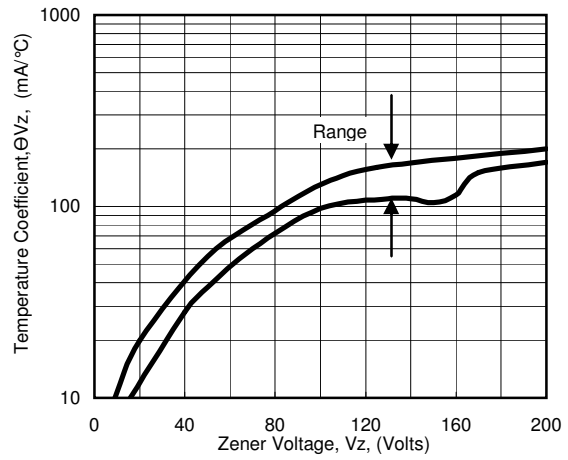


Fig. 2 - Temperature Coefficients v.s. Zener Voltage

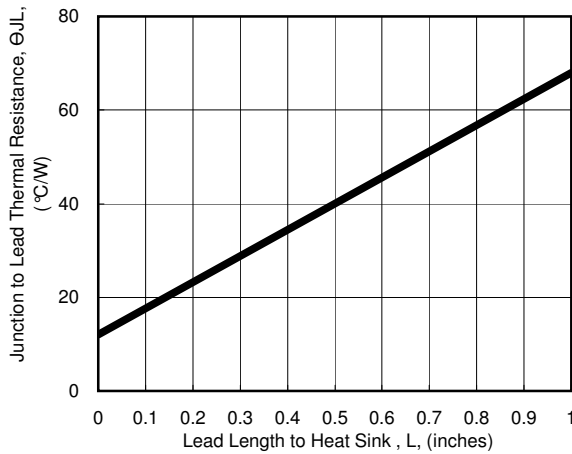


Fig. 3 - Typical Thermal Resistance v.s. Lead Length

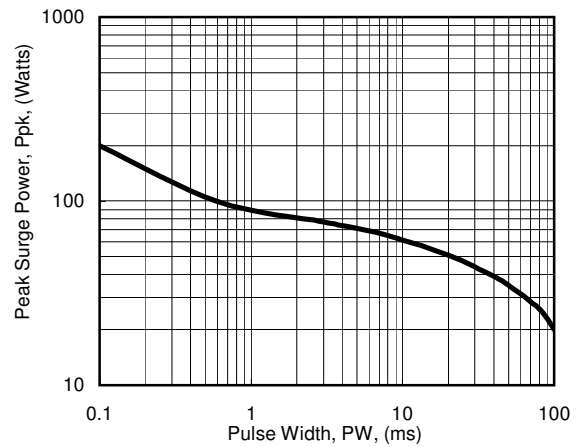


Fig. 4 - Maximum Surge Power

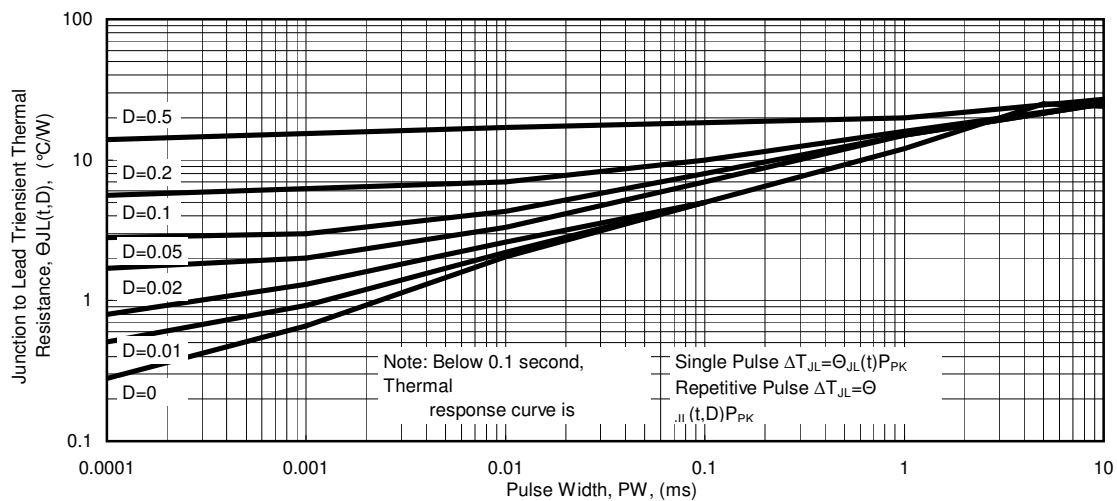


Fig. 5 - Typical Thermal Response L, Lead Length=3/8inch



ZENER 3W SERIES	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener
	VZ @ IZT	IZT	ZZT @ IZT	ZZK @ IZK	IZK	IR @ VR		IZM
	(V)	(mA)	(Ω)	(Ω)	(mA)	(mA)	(V)	(mA)
3EZ6.2D5	6.2	121.0	1.5	700	1.0	5.0	3.0	435
3EZ6.8D6	6.8	110.0	2.0	700	1.0	50.0	4.0	393
3EZ7.5D5	7.5	100.0	2.0	700	0.5	50.0	5.0	360
3EZ8.2D5	8.2	91.0	2.3	700	0.5	50.0	6.0	330
3EZ9.1D5	9.1	82.0	2.5	700	0.5	50.0	7.0	297
3EZ10D5	10	75.0	3.5	700	0.25	50.0	7.6	270
3EZ11D5	11	68.0	4.0	700	0.25	50.0	8.4	225
3EZ12D5	12	63.0	4.5	700	0.25	1.0	9.1	246
3EZ13D5	13	58.0	4.5	700	0.25	0.5	9.9	208
3EZ15D5	15	50.0	5.5	700	0.25	0.5	11.4	180
3EZ16D5	16	47.0	5.5	700	0.25	0.5	12.2	169
3EZ18D5	18	42.0	6.0	750	0.25	0.5	13.7	150
3EZ20D5	20	37.0	7.0	750	0.25	0.5	15.2	135
3EZ22D5	22	34.0	8.0	750	0.25	0.5	16.7	123
3EZ24D5	24	31.0	9.0	750	0.25	0.5	18.2	112
3EZ27D5	27	28.0	10.0	750	0.25	0.5	20.6	100
3EZ30D5	30	25.0	16.0	750	0.25	0.5	22.5	90
3EZ33D5	33	23.0	20.0	1000	0.25	0.5	25.1	82
3EZ36D5	36	21.0	22.0	1000	0.25	0.5	27.4	75
3EZ39D5	39	19.0	28.0	1000	0.25	0.5	29.7	69
3EZ43D5	43	17.0	33.0	950	0.25	0.5	32.7	63
3EZ47D5	47	16.0	38.0	1500	0.25	0.5	35.6	57
3EZ51D5	51	15.0	45.0	1500	0.25	0.5	38.8	53
3EZ56D5	56	13.0	50.0	2000	0.25	0.5	42.6	48
3EZ62D5	62	12.0	55.0	2000	0.25	0.5	47.1	44
3EZ68D5	68	11.0	70.0	2000	0.25	0.5	51.7	40
3EZ75D5	75	10.0	85.0	2000	0.25	0.5	56.0	36
3EZ82D5	82	9.1	95.0	3000	0.25	0.5	62.2	33
3EZ91D5	91	8.2	115.0	3000	0.25	0.5	69.2	30
3EZ100D5	100	7.5	160.0	3000	0.25	0.5	76.0	27
3EZ110D5	110	6.8	225.0	4000	0.25	0.5	83.6	25
3EZ120D5	120	6.3	300.0	4500	0.25	0.5	91.2	22
3EZ130D5	130	5.8	375.0	5000	0.25	0.5	98.8	21
3EZ140D5	140	5.3	475.0	5000	0.25	0.5	106.4	19
3EZ150D5	150	5.0	550.0	6000	0.25	0.5	114.0	18
3EZ160D5	160	4.7	625.0	6500	0.25	0.5	121.6	17
3EZ170D5	170	4.4	650.0	7000	0.25	0.5	130.4	16
3EZ180D5	180	4.2	700.0	7000	0.25	0.5	136.8	15
3EZ190D5	190	4.0	800.0	8000	0.25	0.5	144.8	14
3EZ200D5	200	3.7	875.0	8000	0.25	0.5	152.0	13

NOTES:

- (1) The type number listed have a standard tolerance on the nominal zener voltage of $\pm 5\%$.
- (2) The reverse surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed.