

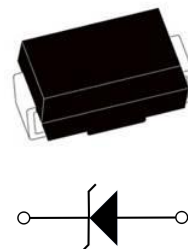
YAZ1D3V3 THRU YAZ1D330

FEATURES

- Total power dissipation: Max. 1W.
- Wide zener reverse voltage range 3.3V to 330V.
- Small plastic package suitable for surface mounted design.

Mechanical Data

- Case: SMAG
- Terminals: Solderable per MIL-STD-750, Method 2026



Absolute Maximum Ratings And Characteristics (Ta = 25 °C)

Parameter	Symbol	Value	Unit
Power Dissipation	$P_d (T_L=75^{\circ}\text{C})$	1	W
Zener current	I_Z	P_V/V_Z	mA
Forward voltage	$V_F (I_F=200\text{mA})$	1.2	V
Junction Temperature Range	T_j	-55~+150	°C
Storage Temperature Range	T_{stg}	-55~+150	°C

Electrical Characteristics (TA = 25 °C)

Part Number	Nominal Zener Voltage @ I_T			$I_{ZT}(\text{mA})$	Maximum Zener Impedance	Maximum Reverse Leakage Current		Maximum DC Zener Current
	Nom (V)	Min (V)	Max (V)		$Z_{zt \text{ max.}@I_{zt}}$ (Ω)	$I_r(\mu\text{A})@V_R$	$V_R(\text{V})$	$I_{ZM}(\text{mA})$
YAZ1D3V3	3.3	3.10	3.50	75	10	100	1	285
YAZ1D3V6	3.6	3.40	3.80	69	10	100	1	263
YAZ1D3V9	3.9	3.70	4.10	64	9.0	50	1	243
YAZ1D4V3	4.3	4.06	4.56	58	9.0	25	1	219
YAZ1D4V7	4.7	4.50	4.93	53	8.0	10	1	203
YAZ1D5V1	5.1	4.84	5.36	49	7.0	10	1	186
YAZ1D5V6	5.6	5.32	5.92	45	5.0	10	2	170
YAZ1D6V2	6.2	5.86	6.51	41	2.0	10	3	154
YAZ1D6V8	6.8	6.46	7.18	37	3.5	10	4	140
YAZ1D7V5	7.5	7.12	7.88	34	4.0	10	5	127
YAZ1D8V2	8.2	7.79	8.67	31	4.5	10	6	116
YAZ1D9V1	9.1	8.60	9.59	28	5.0	10	7	104
YAZ1D10	10	9.50	10.5	25	7.0	10	7	95
YAZ1D11	11	10.4	11.6	23	8.0	5	8	86
YAZ1D12	12	11.4	12.6	21	9.0	5	9	79

YAZ1D13	13	12.4	14.1	19	10	5	10	71
YAZ1D15	15	13.8	15.8	17	14	5	11	63
YAZ1D16	16	15.2	17.1	16	16	5	12	58
YAZ1D18	18	16.8	19.2	14	20	5	13	52
YAZ1D20	20	19.0	21.2	13	22	5	15	47
YAZ1D22	22	20.8	23.3	12	23	5	17	43
YAZ1D24	24	22.8	26.0	11	25	5	18	38
YAZ1D27	27	25.3	28.9	9.5	35	5	21	35
YAZ1D30	30	28.2	32.0	8.5	40	5	23	31
YAZ1D33	33	31.3	34.9	7.5	45	5	25	28
YAZ1D36	36	34.2	37.9	7.0	50	5	27	26
YAZ1D39	39	37.2	41.5	6.5	60	5	30	24
YAZ1D43	43	40.9	45.6	6.0	70	1	32	22
YAZ1D47	47	44.9	49.8	5.5	80	1	35	20
YAZ1D51	51	48.6	54.0	5.0	95	1	38	18
YAZ1D56	56	53.6	58.8	4.5	110	1	42	17
YAZ1D62	62	58.9	65.6	4.0	125	1	47	15
YAZ1D68	68	64.6	71.7	3.7	150	1	52	14
YAZ1D75	75	71.2	78.8	3.3	175	1	56	12
YAZ1D82	82	77.9	87.0	3.0	200	1	62	11
YAZ1D92	91	86.0	96.0	2.8	250	1	69	10
YAZ1D100	100	95.0	105	2.5	350	1	76	9.5
YAZ1D110	110	104	116	2.3	450	1	84	8.6
YAZ1D120	120	114	127	2.0	550	1	91	7.8
YAZ1D135	135	125	142	1.9	700	1	100	7.0
YAZ1D150	150	140	157	1.7	900	1	110	6.3
YAZ1D165	165	155	172	1.6	1100	1	120	5.8
YAZ1D180	180	170	191	1.4	1200	1	135	5.2
YAZ1D200	200	189	211	1.2	1400	1	150	4.7
YAZ1D220	220	209	231	1.0	1600	1	165	4.3
YAZ1D240	240	229	251	1.0	1800	1	180	3.9
YAZ1D260	260	249	271	1.0	2000	1	190	3.7
YAZ1D280	280	269	291	1.0	2100	1	205	3.4
YAZ1D300	300	289	315	1.0	2300	1	230	3.1
YAZ1D330	330	313	346	1.0	2500	1	250	2.8

(1) The reverse surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on IZT per method.

Typical Characteristics

Fig.1 Power Temperature Derating Curve

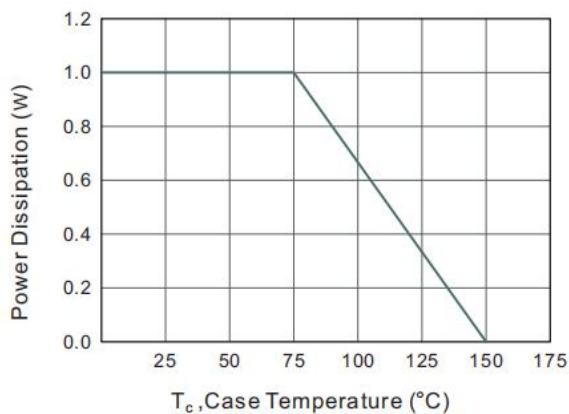


Fig.2 Temperature Coefficients v.s. Zener Voltage

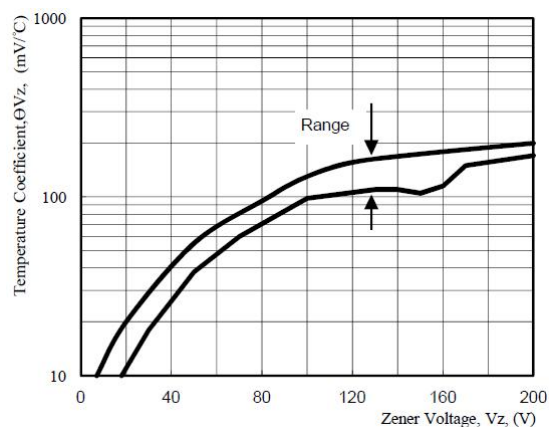


Fig.3 Typical Thermal Resistance v.s. Lead Length

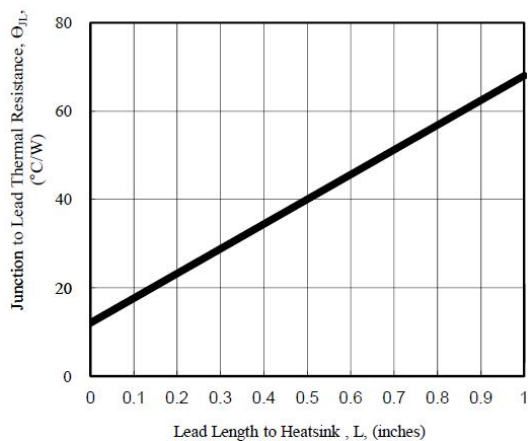


Fig.4 Maximum Surge Power

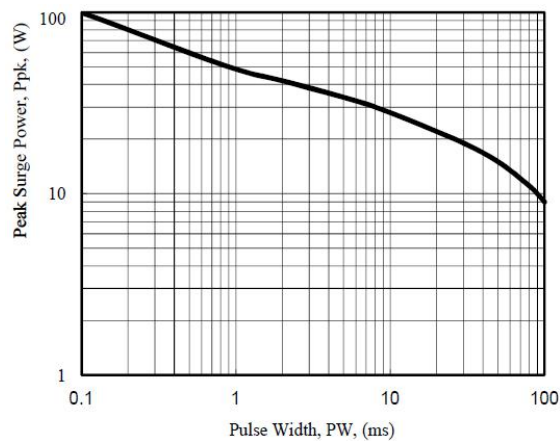
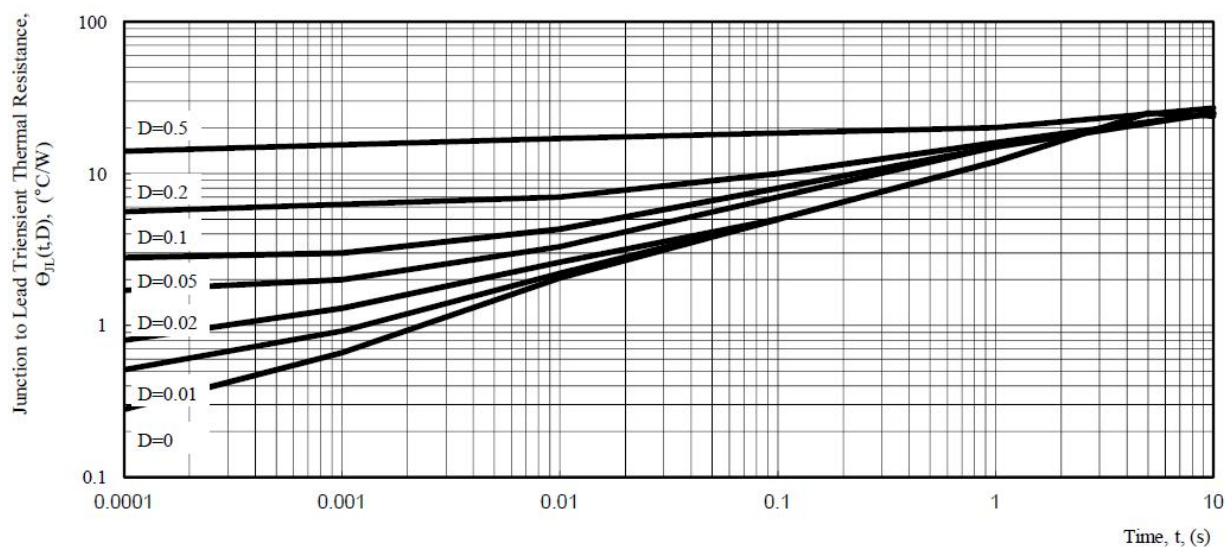
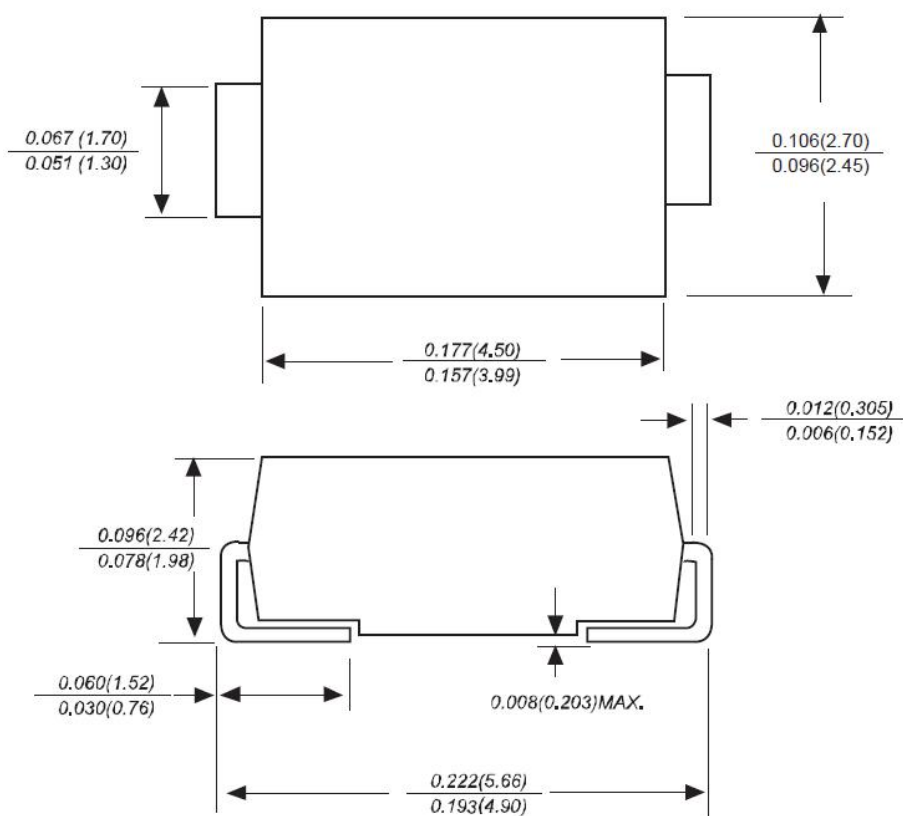


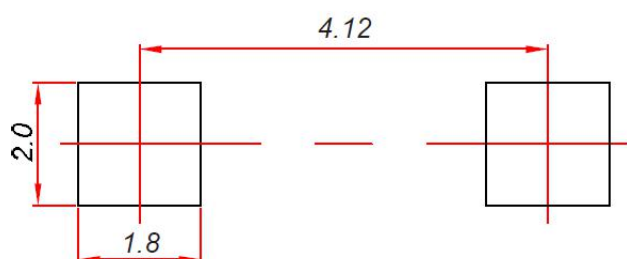
Fig.5 Typical Thermal Response L , Lead Length=3/8inch



Package Outline



Dimensions in inches and (millimeters)



NOTE:

1. Controlling dimension: in millimeters
2. General tolerance: $\pm 0.05\text{mm}$
3. The pad layout is for reference purposes only