

Axial Zener Diodes

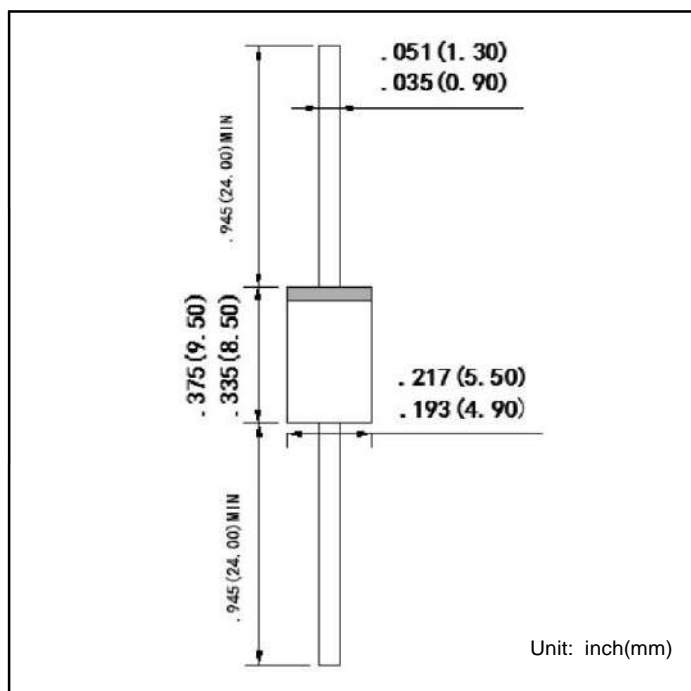
Features:

- Glass passivated chip
- Built-in strain relief
- Low inductance
- High peak reverse power dissipation
- Low reverse leakage
- For use in stabilizing and clipping with high power rating
- RoHS compliant

Mechanical Data:

- Case: DO-27 Molded plastic
- Lead: Solderable per MIL-STD-750, method 2026
- Epoxy: UL 94V-0 rate flame retardant
- Polarity: Color band denotes cathode end
- Mounting position: Any

DO-27



Parameter	Symbols	Value	Unit
DC Power dissipation at TL = 75 °C ⁽¹⁾	P _D	5.0	W
Maximum forward voltage at if=200mA	V _F	1.2	V
Junction temperature range	T _J , T _{STG}	-55 to +150	°C
Storage temperature range	T _J , T _{STG}	-55 to +150	°C

Note :

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

Ratings and Characteristics Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

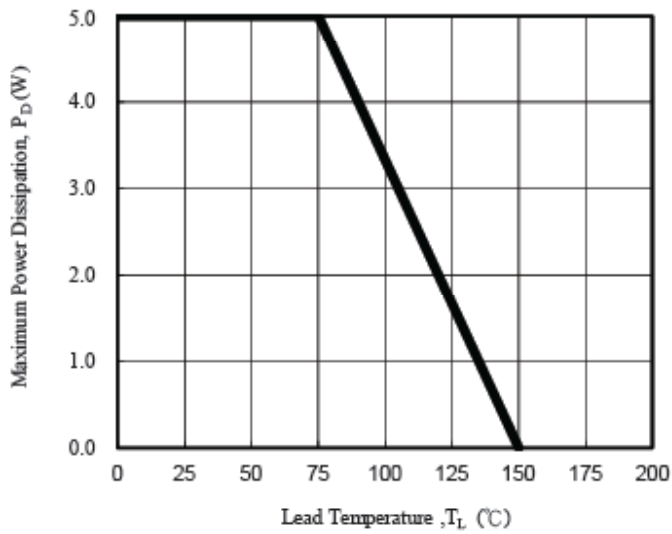


Fig. 1 - Power Temperature Derating Curve

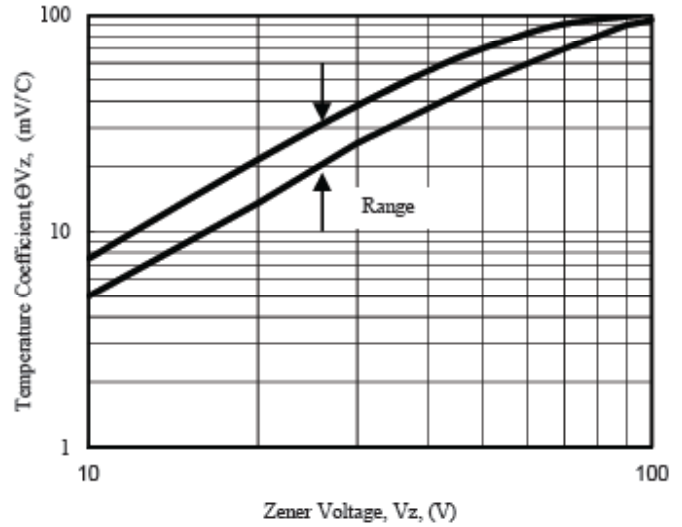


Fig. 2 - Temperature Coefficients v.s. Zener Voltage

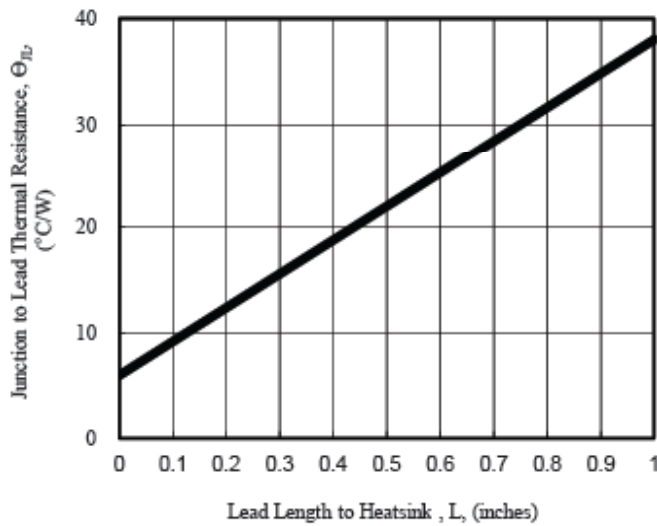


Fig. 3 - Typical Thermal Resistance v.s. Lead Length

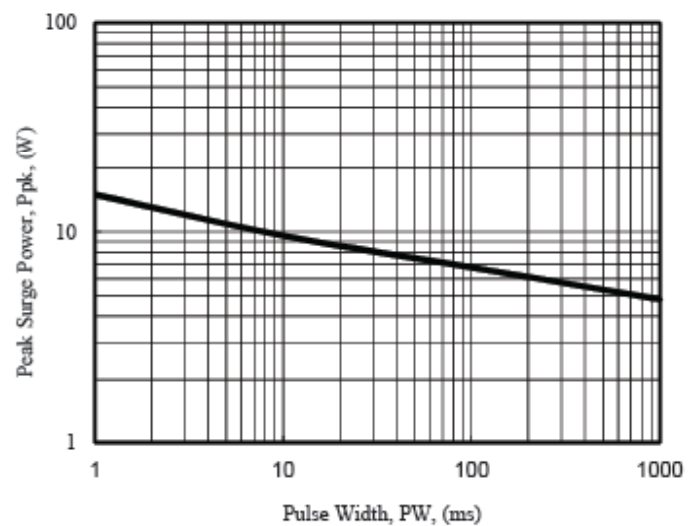


Fig. 4 - Maximum Surge Power

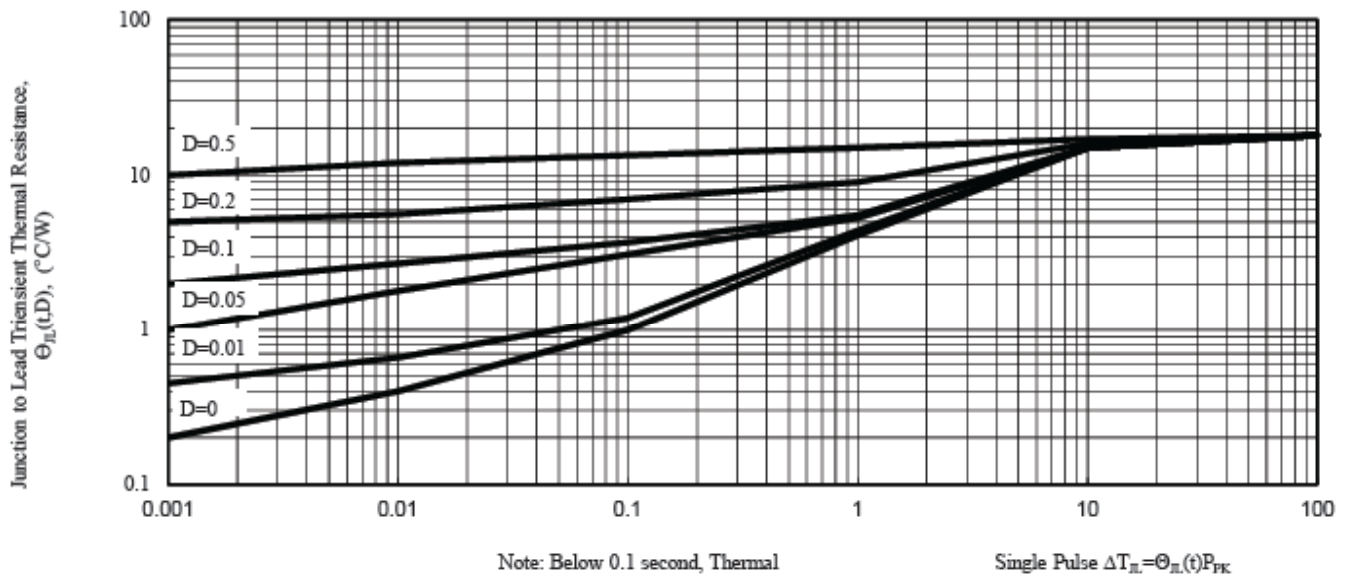


Fig. 5 - Typical Thermal Response L, Lead Length=3/8inch

Part Number	Nominal Zener Voltage @I _T			I _{ZT} (mA)	Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current
	V _{Z AVE.} (V)	V _{Z MIN.} (V)	V _{Z MAX.} (V)		Z _{ZT MAX.} (Ω) @I _{ZT}	Z _{ZK MAX.} (Ω) @I _{ZK}	I _{ZK} (mA)	I _R (μA) @V _R	V _R (V)	
1N5333AD7	3.3	3.14	3.47	380	3.0	400	1.00	300	1.0	1437.0
1N5334AD7	3.6	3.42	3.78	350.0	2.5	500	1.00	150	1.0	1317.0
1N5335AD7	3.9	3.71	4.10	320.0	2.0	500	1.00	50	1.0	1216.0
1N5336AD7	4.3	4.09	4.52	290.0	2.0	500	1.00	10	1.0	1103.0
1N5337AD7	4.7	4.47	4.94	260.0	2.0	450	1.00	5	1.0	1009.0
1N5338AD7	5.1	4.85	5.36	240.0	1.5	400	1.00	1.0	1.0	930.0
1N5339AD7	5.6	5.32	5.88	220.0	1.0	400	1.00	1.0	2.0	846.0
1N5340AD7	6.0	5.70	6.30	200.0	1.0	300	1.00	1.0	3.0	790.0
1N5341AD7	6.2	5.89	6.51	200.0	1.0	200	1.00	1.0	3.0	765.0
1N5342AD7	6.8	6.46	7.14	175.0	1.0	200	1.00	10.0	5.2	700.0
1N5343AD7	7.5	7.13	7.88	175.0	1.5	200	1.00	10.0	5.7	630.0
1N5344AD7	8.2	7.79	8.61	150.0	1.5	200	1.00	10.0	6.2	580.0
1N5345AD7	8.7	8.27	9.14	150.0	2.0	200	1.00	10.0	6.6	545.0
1N5346AD7	9.1	8.65	9.56	150.0	2.0	150	1.00	7.5	6.9	520.0
1N5347AD7	10.0	9.50	10.50	125.0	2.0	125	1.00	5	7.6	475.0
1N5348AD7	11.0	10.45	11.55	125.0	2.5	125	1.00	5	8.4	430.0
1N5349AD7	12.0	11.40	12.60	100.0	2.5	125	1.00	2	9.1	395.0
1N5350AD7	13.0	12.35	13.65	100.0	2.5	100	1.00	1	9.9	365.0
1N5351AD7	14.0	13.30	14.70	100.0	2.5	75	1.00	1	10.6	340.0
1N5352AD7	15.0	14.25	15.75	75.0	2.5	75	1.00	1	11.5	315.0
1N5353AD7	16.0	15.20	16.80	75.0	2.5	75	1.00	1	12.2	295.0
1N5354AD7	17.0	16.15	17.85	70.0	2.5	75	1.00	0.5	12.9	280.0
1N5355AD7	18.0	17.10	18.90	65.0	2.5	75	1.00	0.5	13.7	265.0
1N5356AD7	19.0	18.05	19.95	65.0	3.0	75	1.00	0.5	14.4	250.0
1N5357AD7	20.0	19.00	21.00	65.0	3.0	75	1.00	0.5	15.2	237.0
1N5358AD7	22.0	20.90	23.10	50.0	3.5	75	1.00	0.5	16.7	216.0
1N5359AD7	24.0	22.80	25.20	50.0	3.5	100	1.00	0.5	18.2	198.0
1N5360AD7	25.0	23.75	26.25	50.0	4.0	110	1.00	0.5	19.0	190.0
1N5361AD7	27.0	25.65	28.35	50.0	5.0	120	1.00	0.5	20.6	176.0
1N5362AD7	28.0	26.60	29.40	50.0	6.0	130	1.00	0.5	21.2	170.0
1N5363AD7	30.0	28.50	31.50	40.0	8.0	140	1.00	0.5	22.8	158.0
1N5364AD7	33.0	31.35	34.65	40.0	10.0	150	1.00	0.5	25.1	144.0
1N5365AD7	36.0	34.20	37.80	30.0	11.0	160	1.00	0.5	27.4	132.0
1N5366AD7	39.0	37.05	40.95	30.0	14.0	170	1.00	0.5	29.7	122.0
1N5367AD7	43.0	40.85	45.15	30.0	20.0	190	1.00	0.5	32.7	110.0
1N5368AD7	47.0	44.65	49.35	25.0	25.0	210	1.00	0.5	35.8	100.0
1N5369AD7	51.0	48.45	53.55	25.0	27.0	230	1.00	0.5	38.8	93.0
1N5370AD7	56.0	53.20	58.80	20.0	35.0	280	1.00	0.5	42.6	86.0
1N5371AD7	60.0	57.00	63.00	20.0	40.0	350	1.00	0.5	42.5	79.0
1N5372AD7	62.0	58.90	65.10	20.0	42.0	400	1.00	0.5	47.1	76.0
1N5373AD7	68.0	64.60	71.40	20.0	44.0	500	1.00	0.5	51.7	70.0
1N5374AD7	75.0	71.25	78.75	20.0	45.0	620	1.00	0.5	56.0	63.0
1N5375AD7	82.0	77.90	86.10	15.0	65.0	720	1.00	0.5	62.2	58.0
1N5376AD7	87.0	82.65	91.35	15.0	75.0	760	1.00	0.5	66.0	54.5
1N5377AD7	91.0	86.45	95.55	15.0	75.0	760	1.00	0.5	69.2	52.5
1N5378AD7	100.0	95.00	105.00	12.0	90.0	800	1.00	0.5	76.0	47.5
1N5379AD7	110.0	104.50	115.50	12.0	125.0	1000	1.00	0.5	83.6	43.0
1N5380AD7	120.0	114.00	126.00	10.0	170.0	1150	1.00	0.5	91.2	39.5
1N5381AD7	130.0	123.50	136.50	10.0	190.0	1250	1.00	0.5	98.8	36.6
1N5382AD7	140.0	133.00	147.00	8.0	230.0	1500	1.00	0.5	106.0	34.0
1N5383AD7	150.0	142.50	157.50	8.0	330.0	1500	1.00	0.5	114.0	31.6
1N5384AD7	160.0	152.00	168.00	8.0	350.0	1650	1.00	0.5	122.0	29.4
1N5385AD7	170.0	161.50	178.50	8.0	380.0	1750	1.00	0.5	129.0	28.0
1N5386AD7	180.0	171.00	189.00	5.0	430.0	1750	1.00	0.5	137.0	26.4
1N5387AD7	190.0	180.50	199.50	5.0	450.0	1850	1.00	0.5	144.0	25.0
1N5388AD7	200.0	190.00	210.00	5.0	480.0	1850	1.00	0.5	152.0	23.6