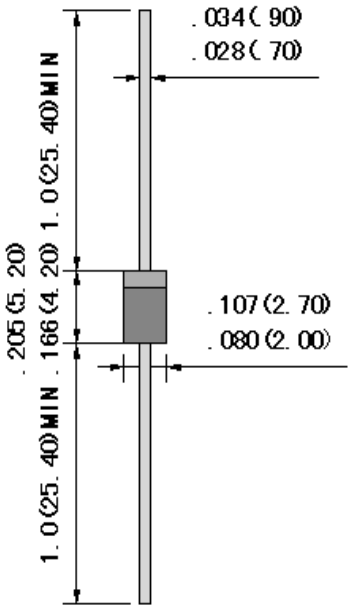
Axial Zener Diodes

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

DO-41



Unit: inch(mm)

Mechanical Data:

- Case: DO-41 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

Parameter	Symbols	Value	Unit
DC Power dissipation at TL = 75 °C(1)	P_D	1.5	W
Maximum forward voltage at if=200mA	V_F	1.2	V
Junction temperature range	T_J , T_{STG}	-55 to +150	℃
Storage temperature range	T_J , T_{STG}	-55 to +150	℃

Note :

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

Ratings and Characteristics Curves (T_A=25℃ unless otherwise noted)

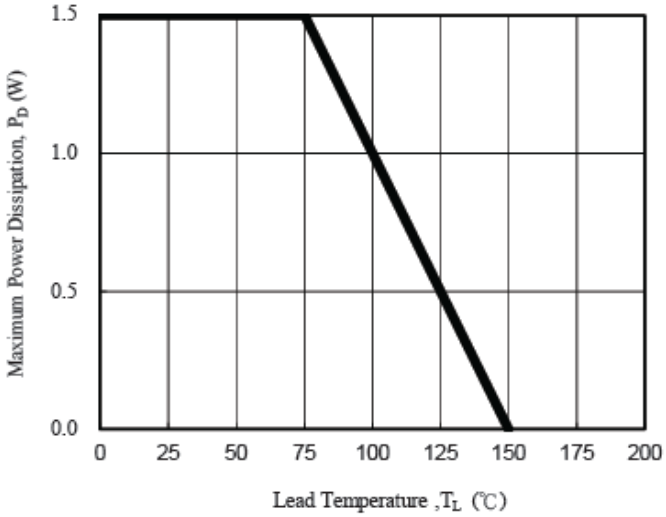


Fig. 1 - Power Temperature Derating Curve

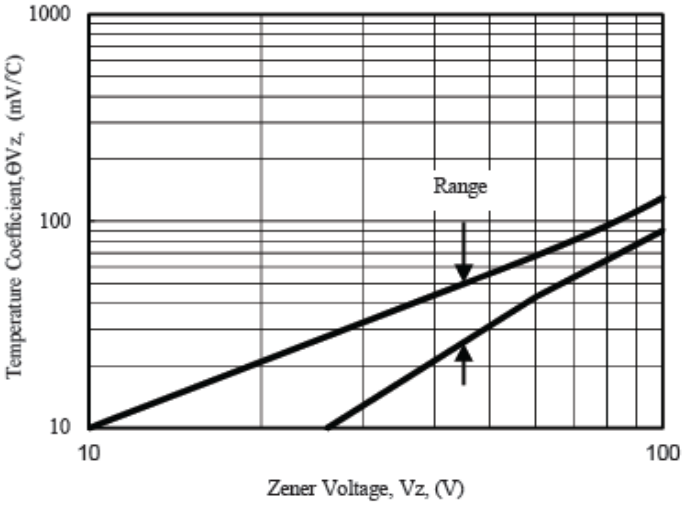


Fig. 2 - Temperature Coefficients v.s. Zener Voltage

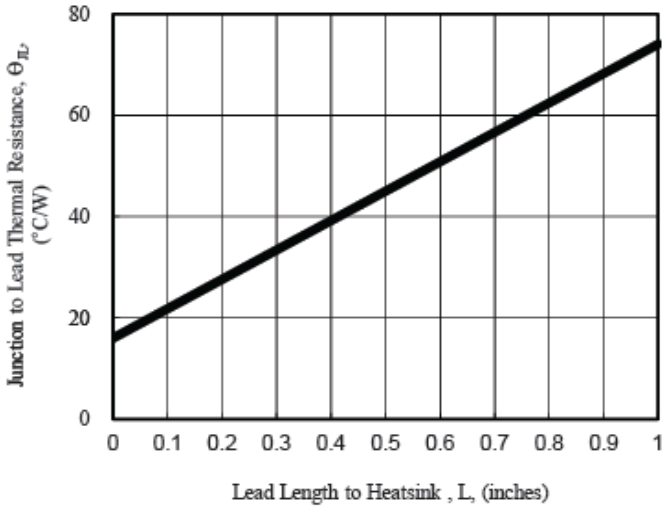


Fig. 3 - Typical Thermal Resistance v.s. Lead Length

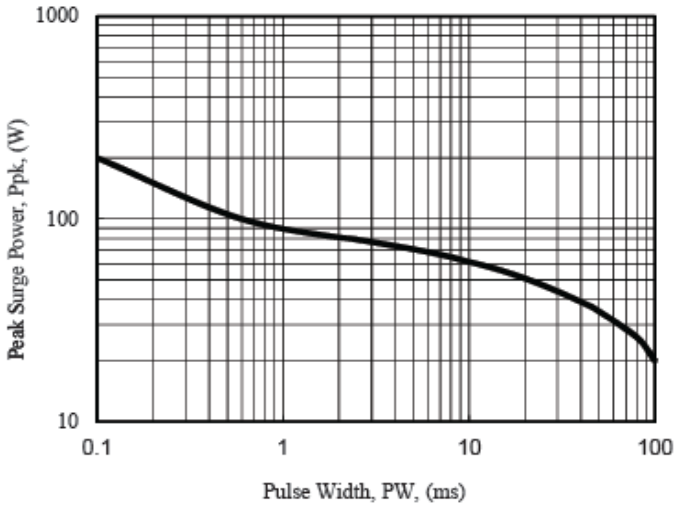


Fig. 4 - Maximum Surge Power

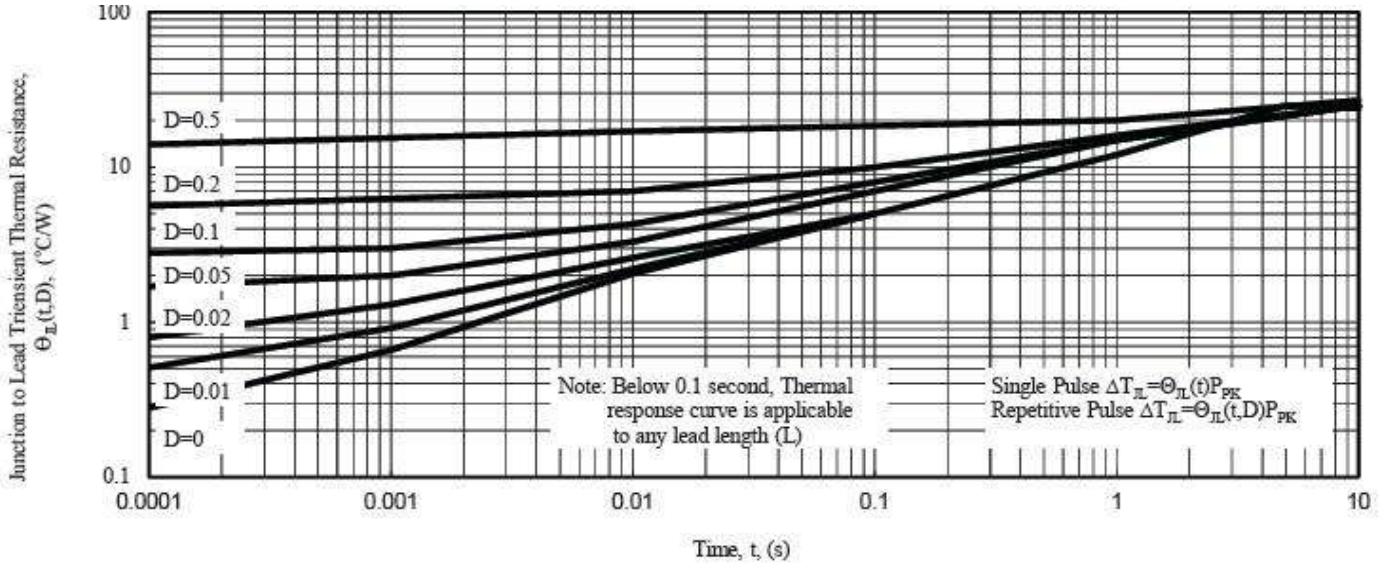


Fig. 5 - Typical Thermal Response L, Lead Length=3/8inch

1N59xxAD1 Series

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(uA)@V_R	V_R(V)	I_{ZM} (mA)
1N5913AD1	3.3	3.14	3.47	113.6	10	500.0	1.00	100.0	1.0	455
1N5914AD1	3.6	3.42	3.78	104.2	9.0	500.0	1.00	100.0	1.0	417
1N5915AD1	3.9	3.71	4.10	96.1	7.5	500.0	1.00	50.0	1.0	385
1N5916AD1	4.3	4.09	4.52	87.2	6.0	500.0	1.00	10.0	1.0	349
1N5917AD1	4.7	4.47	4.94	79.8	5.0	500.0	1.00	10.0	1.5	319
1N5918AD1	5.1	4.85	5.36	73.5	4.0	350.0	1.00	10.0	2.0	294
1N5919AD1	5.6	5.32	5.88	66.9	2.0	250.0	1.00	10.0	3.0	268
1N5920AD1	6.2	5.89	6.51	60.5	2.0	200.0	1.00	10.0	4.0	242
1N5921AD1	6.8	6.46	7.14	55.1	2.5	200.0	1.00	10.0	5.2	221
1N5922AD1	7.5	7.13	7.88	50.0	3.0	400.0	0.50	10.0	6.0	200
1N5923AD1	8.2	7.79	8.61	45.7	3.5	400.0	0.50	10.0	6.5	183
1N5924AD1	9.1	8.65	9.56	41.2	4.0	500.0	0.50	10.0	7.0	165
1N5925AD1	10.0	9.50	10.50	37.5	4.5	500.0	0.25	10.0	8.0	150
1N5926AD1	11.0	10.45	11.55	34.1	5.5	550.0	0.25	0.5	8.4	136
1N5927AD1	12.0	11.40	12.60	31.2	6.5	550.0	0.25	0.5	9.1	125
1N5928AD1	13.0	12.35	13.65	28.8	7.0	550.0	0.25	0.5	9.9	115
1N5929AD1	15.0	14.25	15.75	25.0	9.0	600.0	0.25	0.5	11.4	100
1N5930AD1	16.0	15.20	16.80	23.4	10.0	600.0	0.25	0.5	12.2	94
1N5931AD1	18.0	17.10	18.90	20.8	12.0	650.0	0.25	0.5	13.7	83
1N5932AD1	20.0	19.00	21.00	18.7	14.0	650.0	0.25	0.5	15.2	75
1N5933AD1	22.0	20.90	23.10	17.0	17.5	650.0	0.25	0.5	16.7	68
1N5934AD1	24.0	22.80	25.20	15.6	19.0	700.0	0.25	0.5	18.2	63
1N5935AD1	27.0	25.65	28.35	13.9	23.0	700.0	0.25	0.5	20.6	56
1N5936AD1	30.0	28.50	31.50	12.5	26.0	750.0	0.25	0.5	22.8	50
1N5937AD1	33.0	31.35	34.65	11.4	33.0	800.0	0.25	0.5	25.1	45
1N5938AD1	36.0	34.20	37.80	10.4	38.0	850.0	0.25	0.5	27.4	42
1N5939AD1	39.0	37.05	40.95	9.6	45.0	900.0	0.25	0.5	29.7	38
1N5940AD1	43.0	40.85	45.15	8.7	53.0	950.0	0.25	0.5	32.7	35
1N5941AD1	47.0	44.65	49.35	8.0	67.0	1000.0	0.25	0.5	35.8	32
1N5942AD1	51.0	48.45	53.55	7.3	70.0	1100.0	0.25	0.5	38.8	29
1N5943AD1	56.0	53.20	58.80	6.7	86.0	1300.0	0.25	0.5	42.6	27
1N5944AD1	62.0	58.90	65.10	6.0	100.0	1500.0	0.25	0.5	47.1	24
1N5945AD1	68.0	64.60	71.40	5.5	120.0	1700.0	0.25	0.5	51.7	22
1N5946AD1	75.0	71.25	78.75	5.0	140.0	2000.0	0.25	0.5	56.0	20
1N5947AD1	82.0	77.90	86.10	4.6	160.0	2500.0	0.25	0.5	62.2	18
1N5948AD1	91.0	86.45	95.55	4.1	200.0	3000.0	0.25	0.5	69.2	16
1N5949AD1	100.0	95.00	105.00	3.7	250.0	3100.0	0.25	0.5	76.0	15
1N5950AD1	110.0	104.50	115.50	3.4	300.0	4000.0	0.25	0.5	83.6	14
1N5951AD1	120.0	114.00	126.00	3.1	380.0	4500.0	0.25	0.5	91.2	13
1N5952AD1	130.0	123.50	136.50	2.9	450.0	5000.0	0.25	0.5	98.8	12
1N5953AD1	150.0	142.50	157.50	2.5	600.0	6000.0	0.25	0.5	114.0	10
1N5954AD1	160.0	152.00	168.00	2.3	700.0	6500.0	0.25	0.5	121.6	9
1N5955AD1	180.0	171.00	189.00	2.1	900.0	7000.0	0.25	0.5	136.8	8
1N5956AD1	200.0	190.00	210.00	1.9	1200.0	8000.0	0.25	0.5	152.0	8
1N5955AD2	220.0	209.00	231.00	1.5	1600.0	8000.0	0.25	0.5	167.2	7
1N5956AD2	250.0	237.50	262.50	1.4	2000.0	9000.0	0.25	0.5	190.0	6
1N5955AD3	300.0	285.00	315.00	1.2	2300.0	9500.0	0.25	0.5	228.0	5
1N5956AD3	350.0	332.50	367.50	0.9	3000.0	9500.0	0.25	0.5	266.0	4