

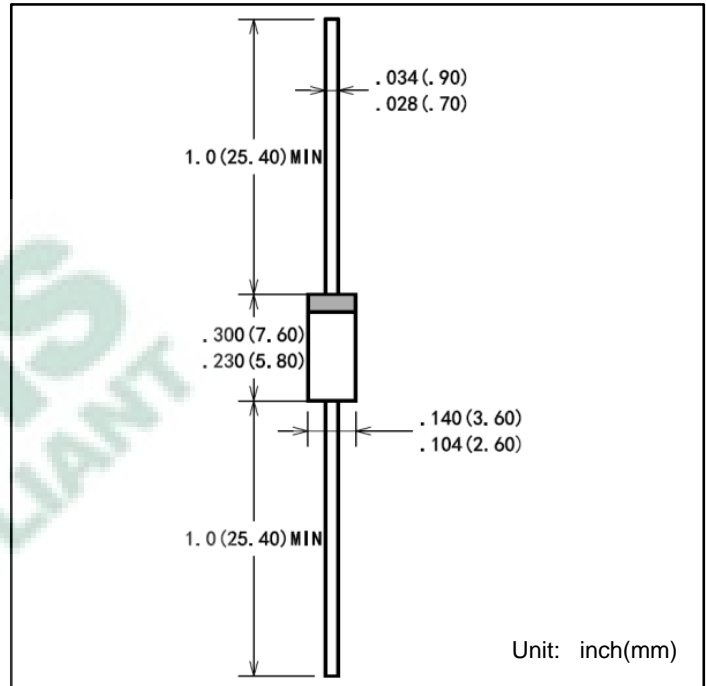
Features

- 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-15 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-15



Parameter	Symbols	Value	Unit
DC Power dissipation at $T_L = 75\text{ }^\circ\text{C}^{(1)}$	P_D	5.0	W
Maximum forward voltage at $i_f=1.0\text{A}$	V_F	1.2	V
Junction temperature range	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$
Storage temperature range	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$

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)

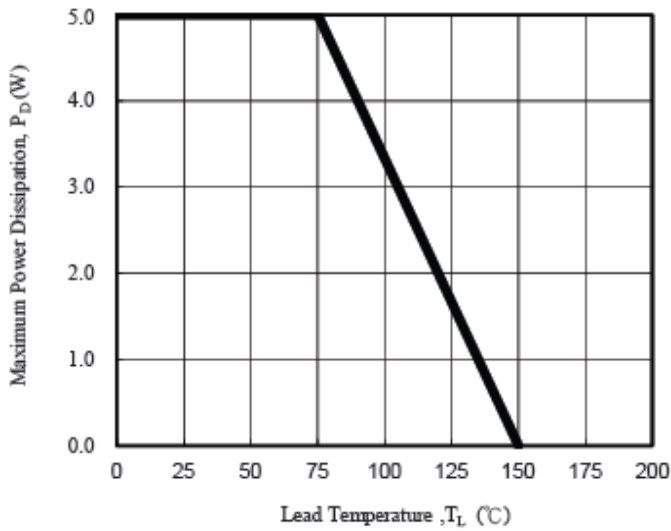


Fig. 1 - Power Temperature Derating Curve

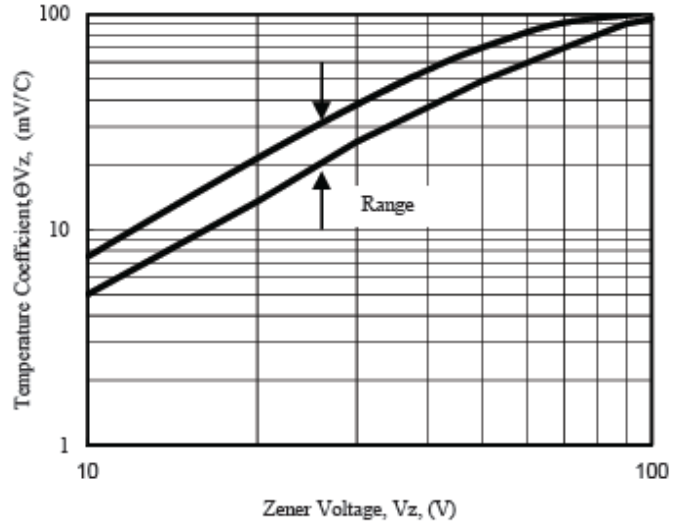


Fig. 2 - Temperature Coefficients v.s. Zener Voltage

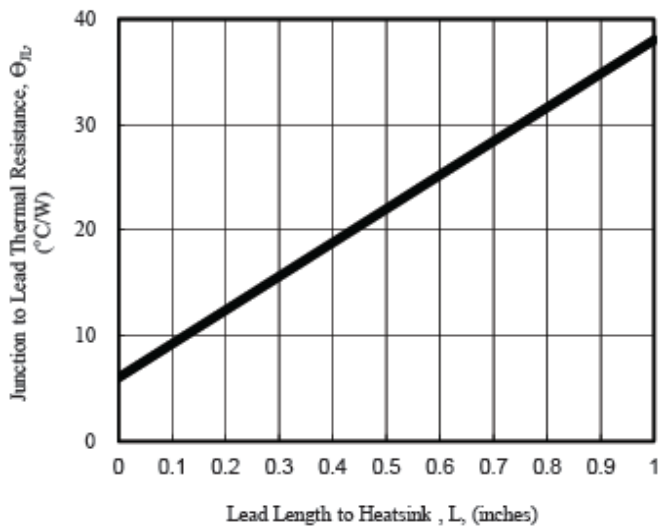


Fig. 3 - Typical Thermal Resistance v.s. Lead Length

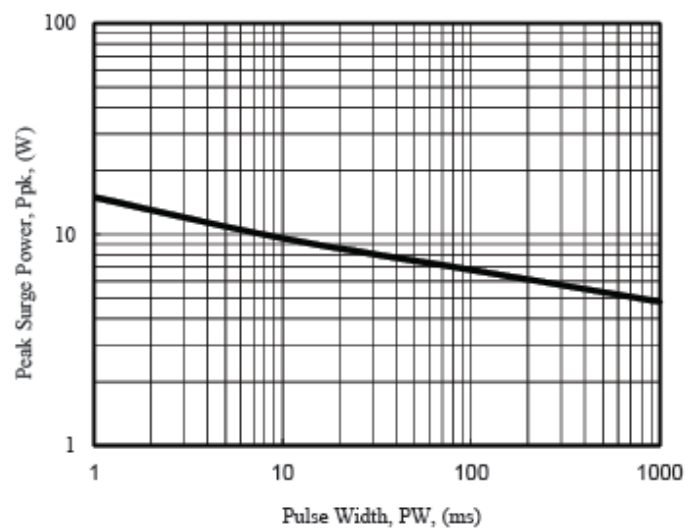
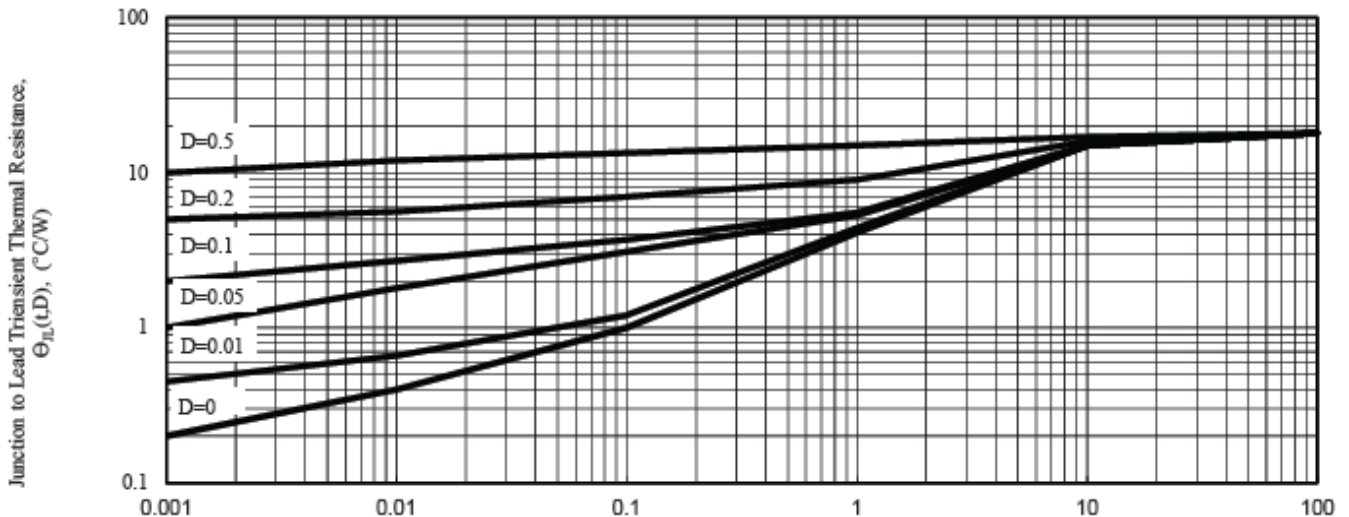


Fig. 4 - Maximum Surge Power



Note: Below 0.1 second, Thermal

Single Pulse $\Delta T_{jL} = \Theta_{jL}(t) P_{PK}$

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



1N53xxAD5 SERIES

Axial Zener Diodes

5.0 Watt Power Dissipation Zener Voltage 3.3 ~ 200 V

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)	
1N5333AD5	3.3	3.14	3.47	380	3.0	400	1.00	300	1.0	1437
1N5334AD5	3.6	3.42	3.78	350	2.5	500	1.00	150	1.0	1317
1N5335AD5	3.9	3.71	4.10	320	2.0	500	1.00	50	1.0	1216
1N5336AD5	4.3	4.09	4.52	290	2.0	500	1.00	10	1.0	1103
1N5337AD5	4.7	4.47	4.94	260	2.0	450	1.00	5	1.0	1009
1N5338AD5	5.1	4.85	5.36	240	1.5	400	1.00	1.0	1.0	930
1N5339AD5	5.6	5.32	5.88	220	1.0	400	1.00	1.0	2.0	856
1N5340AD5	6.0	5.70	6.30	200	1.0	300	1.00	1.0	3.0	790
1N5341AD5	6.2	5.89	6.51	200	1.0	200	1.00	1.0	3.0	765
1N5342AD5	6.8	6.46	7.14	175	1.0	200	1.00	10.0	5.2	700
1N5343AD5	7.5	7.13	7.88	175	1.5	200	1.00	10.0	5.7	630
1N5344AD5	8.2	7.79	8.61	150	1.5	200	1.00	10.0	6.2	580
1N5345AD5	8.7	8.27	9.14	150	2.0	200	1.00	10.0	6.6	545
1N5346AD5	9.1	8.65	9.56	150	2.0	150	1.00	7.5	6.9	520
1N5347AD5	10.0	9.50	10.50	125	2.0	125	1.00	5	7.6	475
1N5348AD5	11.0	10.45	11.55	125	2.5	125	1.00	5	8.4	430
1N5349AD5	12.0	11.40	12.60	100	2.5	125	1.00	2	9.1	395
1N5350AD5	13.0	12.35	13.65	100	2.5	100	1.00	1	9.9	365
1N5351AD5	14.0	13.30	14.70	100	2.5	75	1.00	1	10.6	340
1N5352AD5	15.0	14.25	15.75	75	2.5	75	1.00	1	11.5	315
1N5353AD5	16.0	15.20	16.80	75	2.5	75	1.00	1	12.2	295
1N5354AD5	17.0	16.15	17.85	70	2.5	75	1.00	0.5	12.9	280
1N5355AD5	18.0	17.10	18.90	65	2.5	75	1.00	0.5	13.7	265
1N5356AD5	19.0	18.05	19.95	65	3.0	75	1.00	0.5	14.4	250
1N5357AD5	20.0	19.00	21.00	65	3.0	75	1.00	0.5	15.2	237
1N5358AD5	22.0	20.90	23.10	50	3.5	75	1.00	0.5	16.7	216
1N5359AD5	24.0	22.80	25.20	50	3.5	100	1.00	0.5	18.2	198
1N5360AD5	25.0	23.75	26.25	50	4.0	110	1.00	0.5	19.0	190
1N5361AD5	27.0	25.65	28.35	50	5.0	120	1.00	0.5	20.6	176
1N5362AD5	28.0	26.60	29.40	50	6.0	130	1.00	0.5	21.2	170
1N5363AD5	30.0	28.50	31.50	40	8.0	140	1.00	0.5	22.8	158
1N5364AD5	33.0	31.35	34.65	40	10.0	150	1.00	0.5	25.1	144
1N5365AD5	36.0	34.20	37.80	30	11.0	160	1.00	0.5	27.4	132
1N5366AD5	39.0	37.05	40.95	30	14.0	170	1.00	0.5	29.7	122
1N5367AD5	43.0	40.85	45.15	30	20.0	190	1.00	0.5	32.7	110
1N5368AD5	47.0	44.65	49.35	25	25.0	210	1.00	0.5	35.8	100
1N5369AD5	51.0	48.45	53.55	25	27.0	230	1.00	0.5	38.8	93.0
1N5370AD5	56.0	53.20	58.80	20	35.0	280	1.00	0.5	42.6	86.0
1N5371AD5	60.0	57.00	63.00	20	40.0	350	1.00	0.5	45.5	79.0
1N5372AD5	62.0	58.90	65.10	20	42.0	400	1.00	0.5	47.1	76.0
1N5373AD5	68.0	64.60	71.40	20	44.0	500	1.00	0.5	51.7	70.0
1N5374AD5	75.0	71.25	78.75	20	45.0	620	1.00	0.5	56.0	63.0
1N5375AD5	82.0	77.90	86.10	15	65.0	720	1.00	0.5	62.2	58.0
1N5376AD5	87.0	82.65	91.35	15	75.0	760	1.00	0.5	66.0	54.5
1N5377AD5	91.0	86.45	95.55	15	75.0	760	1.00	0.5	69.2	52.5
1N5378AD5	100.0	95.00	105.0	12	90.0	800	1.00	0.5	76.0	47.5
1N5379AD5	110.0	104.5	115.5	12	125.0	1000	1.00	0.5	83.6	43.0
1N5380AD5	120.0	114.0	126.0	10	170.0	1150	1.00	0.5	91.2	39.5
1N5381AD5	130.0	123.5	136.5	10	190.0	1250	1.00	0.5	98.8	36.6
1N5382AD5	140.0	133.0	147.0	8	230.0	1500	1.00	0.5	106	34.0
1N5383AD5	150.0	142.5	157.5	8	330.0	1500	1.00	0.5	114	31.6
1N5384AD5	160.0	152.0	168.0	8	350.0	1650	1.00	0.5	122	29.4
1N5385AD5	170.0	161.5	178.5	8	380.0	1750	1.00	0.5	129	28.0
1N5386AD5	180.0	171.0	189.0	5	430.0	1750	1.00	0.5	137	26.4
1N5387AD5	190.0	180.5	199.5	5	450.0	1850	1.00	0.5	144	25.0
1N5388AD5	200.0	190.0	210.0	5	480.0	1850	1.00	0.5	152	23.6