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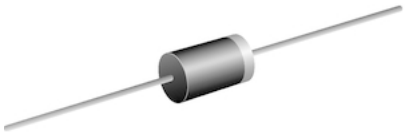
3EZxxAD5 SERIES

Axial Zener Diodes
Zener Voltage 3.3 ~ 200 V
3.0 Watt Power Dissipation

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-204AC(DO-15)
Axial Leaded

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

Maximum Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbols	Value	Unit
DC Power dissipation at TL = 75 °C(1)	P_D	3.0	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

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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)
3EZ3.3AD5	3.3	3.14	3.47	227.3	10.0	500	1.00	100	1.0	817
3EZ3.6AD5	3.6	3.42	3.78	208.3	9.0	500	1.00	75	1.0	749
3EZ3.9AD5	3.9	3.71	4.10	192.0	4.5	400	1.00	80	1.0	691
3EZ4.3AD5	4.3	4.09	4.52	174.0	4.5	400	1.00	30	1.0	627
3EZ4.7AD5	4.7	4.47	4.94	160.0	4.0	500	1.00	20	1.0	573
3EZ5.1AD5	5.1	4.85	5.36	147.0	3.5	550	1.00	5.0	1.0	528
3EZ5.6AD5	5.6	5.32	5.88	134.0	2.5	600	1.00	5.0	2.0	481
3EZ6.2AD5	6.2	5.89	6.51	121.0	1.5	700	1.00	5.0	3.0	435
3EA6.8AD5	6.8	6.46	7.14	110.0	2.0	700	1.00	5.0	4.0	393
3EZ7.5AD5	7.5	7.13	7.88	100.0	2.0	700	0.50	5.0	5.0	360
3EZ8.2AD5	8.2	7.79	8.61	91.0	2.3	700	0.50	5.0	6.0	330
3EZ9.1AD5	9.1	8.65	9.56	82.0	2.5	700	0.50	3.0	7.0	297
3EZ10AD5	10.0	9.50	10.50	75.0	3.5	700	0.25	3.0	7.6	270
3EZ11AD5	11.0	10.45	11.55	68.0	4.0	700	0.25	1.0	8.4	225
3EZ12AD5	12.0	11.40	12.60	63.0	4.5	700	0.25	1.0	9.1	246
3EZ13AD5	13.0	12.35	13.65	58.0	4.5	700	0.25	0.5	9.9	208
3EZ14AD5	14.0	13.30	14.70	53.0	5.0	700	0.25	0.5	10.6	193
3EZ15AD5	15.0	14.25	15.75	50.0	5.5	700	0.25	0.5	11.4	180
3EZ16AD5	16.0	15.20	16.80	47.0	5.5	700	0.25	0.5	12.2	169
3EZ17AD5	17.0	16.15	17.85	44.0	6.0	750	0.25	0.5	13.0	159
3EZ18AD5	18.0	17.10	18.90	42.0	6.0	750	0.25	0.5	13.7	150
3EZ19AD5	19.0	18.05	19.95	40.0	7.0	750	0.25	0.5	14.4	142
3EZ20AD5	20.0	19.00	21.00	37.0	7.0	750	0.25	0.5	15.2	135
3EZ22AD5	22.0	20.90	23.10	34.0	8.0	750	0.25	0.5	16.7	123
3EZ24AD5	24.0	22.80	25.20	31.0	9.0	750	0.25	0.5	18.2	112
3EZ27AD5	27.0	25.65	28.35	28.0	10.0	750	0.25	0.5	20.6	100
3EZ30AD5	30.0	28.50	31.50	25.0	16.0	1000	0.25	0.5	22.5	90.0
3EZ33AD5	33.0	31.35	34.65	23.0	20.0	1000	0.25	0.5	25.1	82.0
3EZ36AD5	36.0	34.20	37.80	21.0	22.0	1000	0.25	0.5	27.4	75.0
3EZ39AD5	39.0	37.05	40.95	19.0	28.0	1000	0.25	0.5	29.7	69.0
3EZ43AD5	43.0	40.85	45.15	17.0	33.0	1500	0.25	0.5	32.7	63.0
3EZ47AD5	47.0	44.65	49.35	16.0	38.0	1500	0.25	0.5	35.6	57.0
3EZ51AD5	51.0	48.45	53.55	15.0	45.0	1500	0.25	0.5	38.8	53.0
3EZ56AD5	56.0	53.20	58.80	13.0	50.0	2000	0.25	0.5	42.6	48.0
3EZ62AD5	62.0	58.90	65.10	12.0	55.0	2000	0.25	0.5	47.1	44.0
3EZ68AD5	68.0	64.60	71.40	11.0	70.0	2000	0.25	0.5	51.7	40.0
3EZ75AD5	75.0	71.25	78.75	10.0	85.0	2000	0.25	0.5	56.0	36.0
3EZ82AD5	82.0	77.90	86.10	9.1	95.0	3000	0.25	0.5	62.2	33.0
3EZ91AD5	91.0	86.45	95.55	8.2	115.0	3000	0.25	0.5	69.2	30.0
3EZ100AD5	100.0	95.00	105.0	7.5	160.0	3000	0.25	0.5	76.0	27.0
3EZ110AD5	110.0	104.5	115.5	6.8	225.0	4000	0.25	0.5	83.6	25.0
3EZ120AD5	120.0	114.0	126.0	6.3	300.0	4500	0.25	0.5	91.2	22.0
3EZ130AD5	130.0	123.5	136.5	5.8	375.0	5000	0.25	0.5	98.8	21.0
3EZ140AD5	140.0	133.0	147.0	5.3	475.0	5000	0.25	0.5	106.4	19.0

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	$V_{Z\ AVE.}$(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)
3EZ150AD5	150.0	142.5	157.5	5.0	550.0	6000	0.25	0.5	114.0	18.0
3EZ160AD5	160.0	152.0	168.0	4.7	625.0	6500	0.25	0.5	121.6	17.0
3EZ170AD5	170.0	161.5	178.5	4.4	650.0	7000	0.25	0.5	130.4	16.0
3EZ180AD5	180.0	171.0	189.0	4.2	700.0	7000	0.25	0.5	136.8	15.0
3EZ190AD5	190.0	180.5	199.5	4.0	800.0	8000	0.25	0.5	144.8	14.0
3EZ200AD5	200.0	190.0	210.0	3.7	875.0	8000	0.25	0.5	152.0	13.0

Characteristics Curves (T_A=25℃ unless otherwise noted)

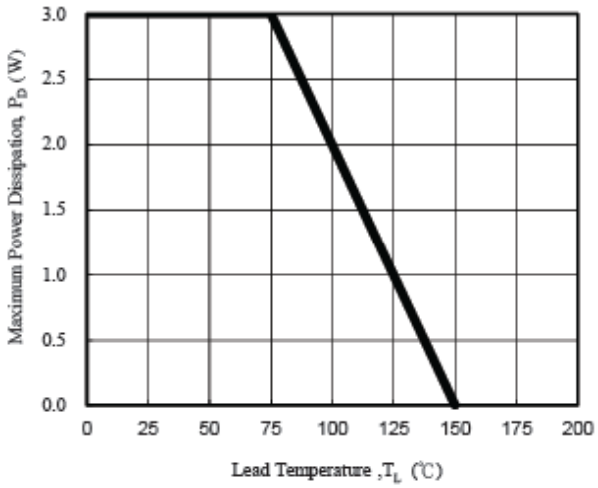


Fig. 1 - Power Temperature Derating Curve

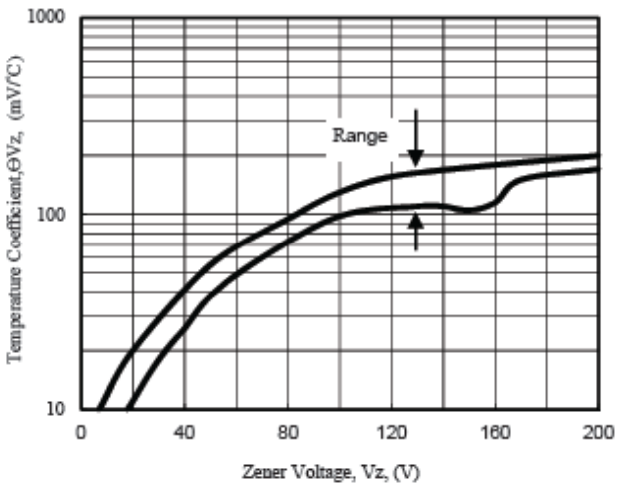


Fig. 2 - Temperature Coefficients v.s. Zener Voltage

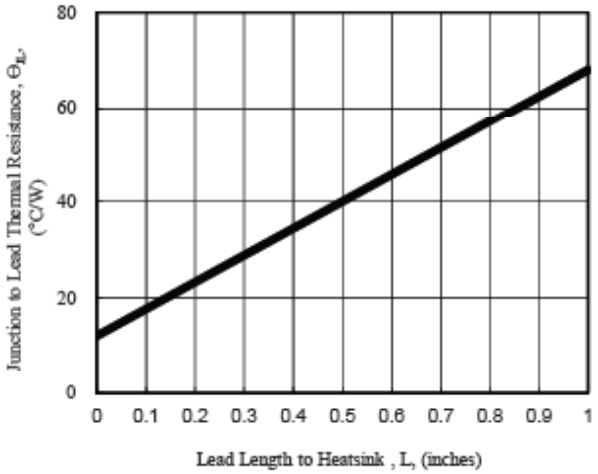


Fig. 3 - Typical Thermal Resistance v.s. Lead Length

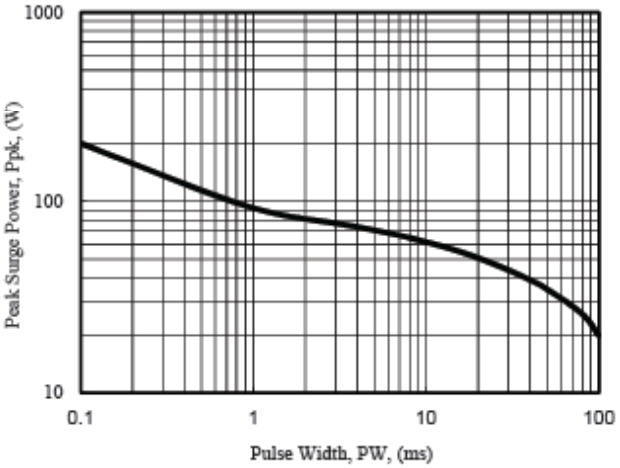


Fig. 4 - Maximum Surge Power

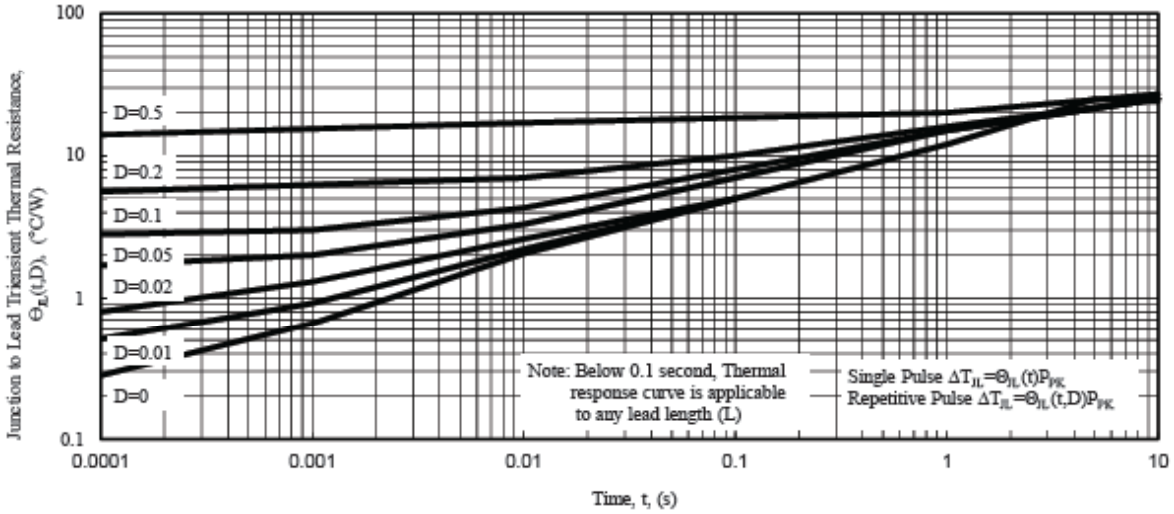
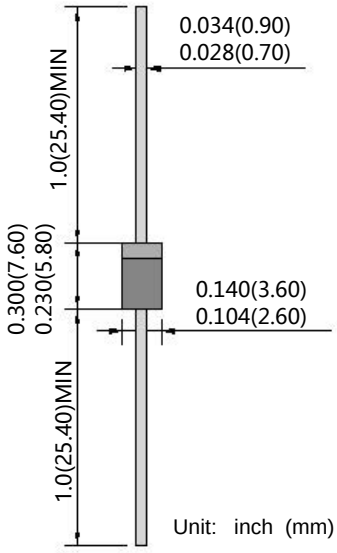


Fig. 5 - Typical Thermal Response L, Lead Length=3/8inch

Package Outline

DO-15



Package Information

Qty：4,000 /Tape and reel
500 /Bulk