

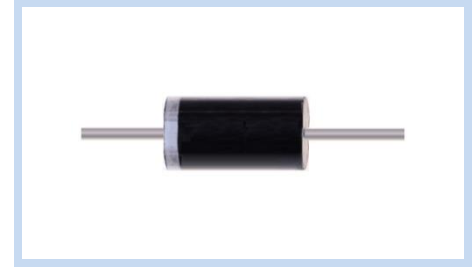
Zener Diodes DO-15 Axial Leaded

2EZ-D5 Series

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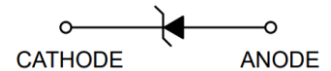
FEATURE

- Zener Voltage Range: 5.6V to 330V
- Zener Voltage Tolerance: $\pm 5\%$
- Power Dissipation: 2W
- Glass Passivation Junction, Low Inductance
- Built-In Strain Relief
- High Peak Reverse Power Dissipation



MECHANICAL DATA

- Flammability Classification Rating UL 94V-0
- Solderable Per MIL-STD-202, Method 208
- Polarity: Color Band Denoted Cathode End



MAXIMUM RATINGS

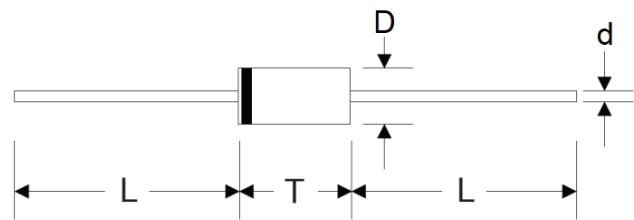
Parameter	Symbols	Value	Unit
Power Dissipation at $T_L = 75^\circ\text{C}$	P_D	2	W
Maximum Forward Voltage At $I_F = 200\text{mA}$	V_F	1.5	V
Junction Temperature	T_J	-55~+150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55~+150	$^\circ\text{C}$

Note:

1. $T_A = 25^\circ\text{C}$ unless otherwise noted
2. T_L = Lead Temperature at 3/8 (9.5mm) from body

DIMENSIONS

Item	DO-15	
	Min. (mm)	Max. (mm)
D	0.71	0.84
T	5.85	7.63
L	25.4	-
d	2.60	3.61



ELECTRICAL CHARACTERISTICS

Part Number	Nominal Zener Voltage		Maximum Zener Impedance			Max Reverse Leakage Current		Max Zener Current
	$V_Z @ I_{ZT}$	I_{ZT}	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	I_{ZK}	$I_R @ V_R$		I_{ZM}
	V	mA	Ω	Ω	mA	μA	V	mA
2EZ5.6D5	5.6	89.5	2.5	500	1.0	5.0	2.0	323
2EZ6.2D5	6.2	80.5	1.5	700	1.0	5.0	3.0	292
2EZ6.8D5	6.8	73.5	2.0	700	1.0	5.0	4.0	266
2EZ7.5D5	7.5	66.5	2.0	700	0.5	5.0	5.0	242
2EZ8.2D5	8.2	61.0	2.3	700	0.5	5.0	6.0	220
2EZ9.1D5	9.1	55.0	2.5	700	0.5	3.0	7.0	200
2EZ10D5	10.0	50.0	3.5	700	0.25	3.0	7.6	182
2EZ11D5	11.0	45.5	4.0	700	0.25	1.0	8.4	166

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Part Number	Nominal Zener Voltage		Maximum Zener Impedance			Max Reverse Leakage Current		Max Zener Current
	V _Z @ I _{ZT}	I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _{ZK}	I _R @V _R		I _{ZM}
	V	mA	Ω	Ω	mA	μA	V	mA
2EZ12D5	12.0	41.5	4.5	700	0.25	1.0	9.1	152
2EZ13D5	13.0	38.5	5.0	700	0.25	0.5	9.9	138
2EZ14D5	14.0	35.7	5.5	700	0.25	0.5	10.6	130
2EZ15D5	15.0	33.4	7.0	700	0.25	0.5	11.4	122
2EZ16D5	16.0	31.2	8.0	700	0.25	0.5	12.2	114
2EZ17D5	17.0	29.4	9.0	750	0.25	0.5	13.0	107
2EZ18D5	18.0	27.8	10.0	750	0.25	0.5	13.7	100
2EZ19D5	19.0	26.3	11.0	750	0.25	0.5	14.4	95.0
2EZ20D5	20.0	25.0	11.0	750	0.25	0.5	15.2	90.0
2EZ22D5	22.0	22.8	12.0	750	0.25	0.5	16.7	82.0
2EZ24D5	24.0	20.8	13.0	750	0.25	0.5	18.2	76.0
2EZ27D5	27.0	18.5	18.0	750	0.25	0.5	20.6	68.0
2EZ30D5	30.0	16.6	20.0	1000	0.25	0.5	22.5	60.0
2EZ33D5	33.0	15.1	23.0	1000	0.25	0.5	25.1	55.0
2EZ36D5	36.0	13.9	25.0	1000	0.25	0.5	27.4	50.0
2EZ39D5	39.0	12.8	30.0	1000	0.25	0.5	29.7	47.0
2EZ43D5	43.0	11.6	35.0	1500	0.25	0.5	32.7	43.0
2EZ47D5	47.0	10.6	40.0	1500	0.25	0.5	35.8	39.0
2EZ51D5	51.0	9.8	48.0	1500	0.25	0.5	38.8	36.0
2EZ56D5	56.0	9.0	55.0	2000	0.25	0.5	42.6	32.0
2EZ62D5	62.0	8.1	60.0	2000	0.25	0.5	47.1	29.0
2EZ68D5	68.0	7.4	75.0	2000	0.25	0.5	51.7	27.0
2EZ75D5	75.0	6.7	90.0	2000	0.25	0.5	56.0	24.0
2EZ82D5	82.0	6.1	100	3000	0.25	0.5	62.2	22.0
2EZ91D5	91.0	5.5	125	3000	0.25	0.5	69.2	20.0
2EZ100D5	100	5.0	175	3000	0.25	0.5	76.0	18.0
2EZ110D5	110	4.5	250	4000	0.25	0.5	83.6	17.0
2EZ120D5	120	4.2	325	4500	0.25	0.5	91.2	15.0
2EZ130D5	130	3.8	400	5000	0.25	0.5	98.8	14.0
2EZ140D5	140	3.6	500	5500	0.25	0.5	106.4	13.0
2EZ150D5	150	3.3	575	6000	0.25	0.5	114.0	12.0
2EZ160D5	160	3.1	650	6500	0.25	0.5	121.6	11.0
2EZ170D5	170	2.9	675	7000	0.25	0.5	130.4	11.0
2EZ180D5	180	2.8	725	7000	0.25	0.5	136.8	10.0
2EZ190D5	190	2.6	825	8000	0.25	0.5	144.8	10.0
2EZ200D5	200	2.5	1900	9990	0.25	0.5	152.0	9.0
2EZ220D5	220	2.0	2000	8500	0.25	0.5	167.0	8.0
2EZ270D5	270	1.6	2200	8500	0.25	0.5	205.0	6.7
2EZ300D5	300	1.5	2200	9000	0.25	0.5	228.0	5.9
2EZ330D5	330	1.4	2300	9000	0.25	0.5	250.0	5.4

Note:

1. T_A = 25°C unless otherwise noted
2. Standard tolerance on the nominal zener voltage: ± 5 %
3. The reverse surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on I_{ZT} per JEDEC method

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CHARACTERISTIC CURVES

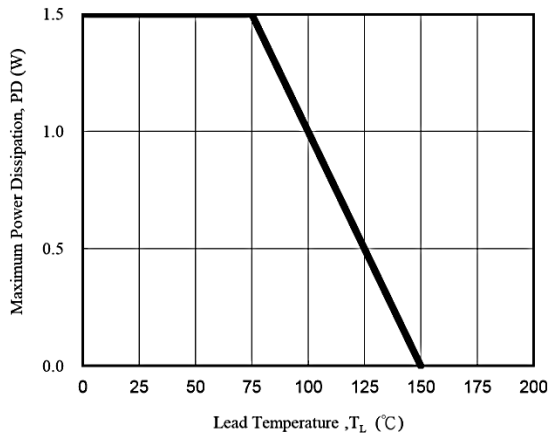


Fig. 1 - Power Temperature Derating Curve

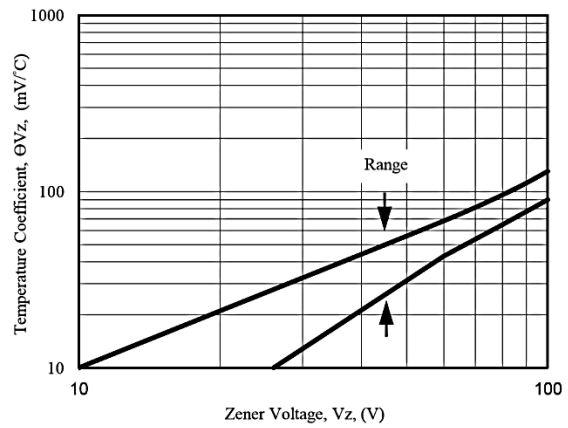


Fig. 2 - Temperature Coefficients v.s. Zener Voltage

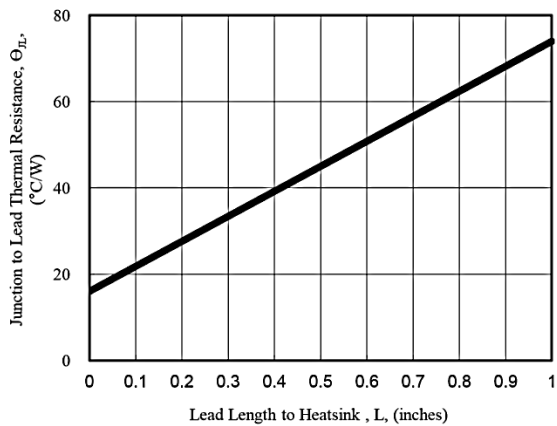


Fig. 3 - Typical Thermal Resistance v.s. Lead Length

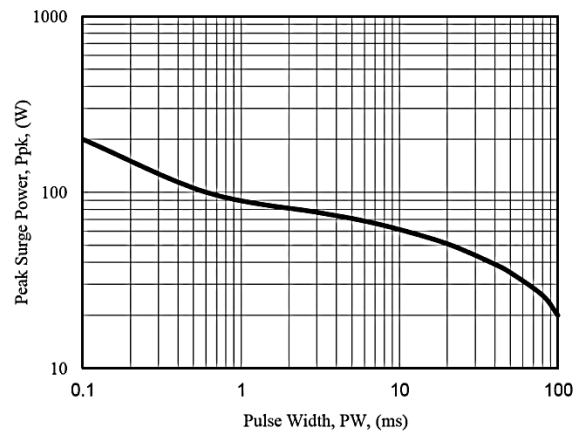


Fig. 4 - Maximum Surge Power

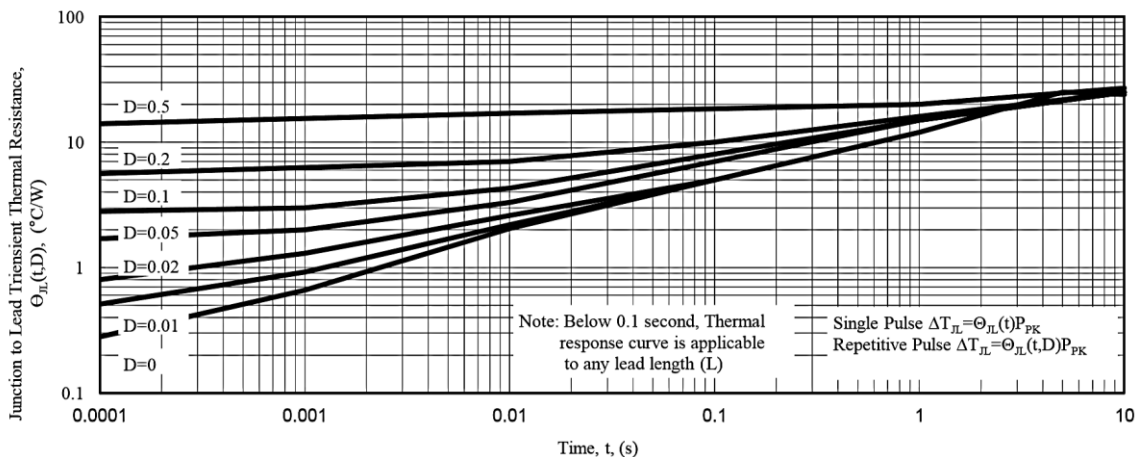


Fig. 5 - Typical Thermal Response L, Lead Length=3/8inch

*Specifications subject to change without notice.