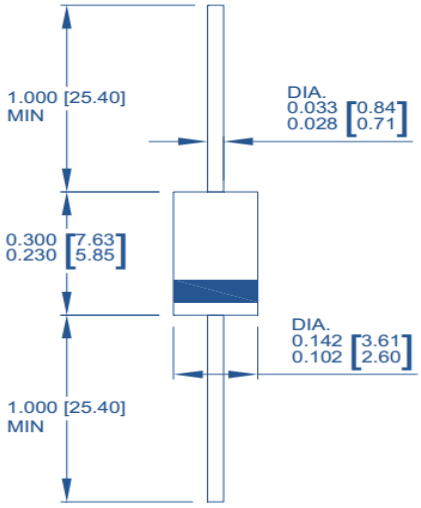
2EZ2.7D5~2EZ330D5

2W Axial Lead Zener Diodes

1. 封裝 Package

- 封裝方式 Method: DO-15
- 封裝尺寸 Dimension: 如圖示



單位 Unit: inch (millimeters)

2. 產品特色 Features

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

3. 機械數據 Mechanical Data

- Epoxy: UL94V-0 rated flame retardant
- Case: Epoxy, Molded
- Terminals: Solder plated solderable per MIL-STD-202 Method 208
- Polarity: Color band denotes cathode end

4. 極限值與電參數 Maximum Ratings & Electrical Characteristic

Rating at 25℃ ambient temperature unless otherwise specified.

Parameter	Symbol	Value	UNIT
DC Power Dissipation at T_L=50℃ (Note 1)	P_D	2	Watts
Max. forward voltage at I_F=200mA	V_F	1.5	Volts
Operating Junction and Storage Temperature Range	T_J ,T_{STG}	-55~+150	℃

Notes：

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

Electrical Characteristics (T_A=25℃ unless otherwise noted)

Part Number	Nominal Zener Voltage		Max. Zener Impedance			Max. Reverse Leakage Current		Max. DC 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
2EZ2.7D5	2.7	80	10	400	1	100	1	670
2EZ3.0D5	3	160	8	400	1	100	1	603
2EZ3.3D5	3.3	145	8	400	1	80	1	548
2EZ3.6D5	3.6	139	5	400	1	80	1	502
2EZ3.9D5	3.9	128	5	400	1	30	1	464
2EZ4.3D5	4.3	116	4.5	400	1	20	1	421
2EZ4.7D5	4.7	106	4.5	550	1	5	1	385
2EZ5.1D5	5.1	98	3.5	600	1	5	1	354
2EZ5.6D5	5.6	89.5	2.5	500	1	5	2	323
2EZ6.2D5	6.2	80.5	1.5	700	1	5	3	292
2EZ6.8D5	6.8	73.5	2	700	1	5	4	266
2EZ7.5D5	7.5	66.5	2	700	0.5	5	5	242
2EZ8.2D5	8.2	61	2.3	700	0.5	5	6	220
2EZ9.1D5	9.1	55	2.5	700	0.5	3	7	200
2EZ10D5	10	50	3.5	700	0.25	3	7.6	182
2EZ11D5	11	45.5	4	700	0.25	1	8.4	166
2EZ12D5	12	41.5	4.5	700	0.25	1	9.1	152
2EZ13D5	13	38.5	5	700	0.25	0.5	9.9	138

Part Number	Nominal Zener Voltage		Max. Zener Impedance			Max. Reverse Leakage Current		Max. DC 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	A
2EZ14D5	14	35.7	5.5	700	0.25	0.5	10.6	130
2EZ15D5	15	33.4	7	700	0.25	0.5	11.4	122
2EZ16D5	16	31.2	8	700	0.25	0.5	12.2	114
2EZ17D5	17	29.4	9	750	0.25	0.5	13	107
2EZ18D5	18	27.8	10	750	0.25	0.5	13.7	100
2EZ19D5	19	26.3	11	750	0.25	0.5	14.4	95
2EZ20D5	20	25	11	750	0.25	0.5	15.2	90
2EZ22D5	22	22.8	12	750	0.25	0.5	16.7	82
2EZ24D5	24	20.8	13	750	0.25	0.5	18.2	76
2EZ27D5	27	18.5	18	750	0.25	0.5	20.6	68
2EZ30D5	30	16.6	20	1000	0.25	0.5	22.5	60
2EZ33D5	33	15.1	23	1000	0.25	0.5	25.1	55
2EZ36D5	36	13.9	25	1000	0.25	0.5	27.4	50
2EZ39D5	39	12.8	30	1000	0.25	0.5	29.7	47
2EZ43D5	43	11.6	35	1500	0.25	0.5	32.7	43
2EZ47D5	47	10.6	40	1500	0.25	0.5	35.8	39
2EZ51D5	51	9.8	48	1500	0.25	0.5	38.8	36
2EZ56D5	56	9	55	2000	0.25	0.5	42.6	32
2EZ62D5	62	8.1	60	2000	0.25	0.5	47.1	29
2EZ68D5	68	7.4	75	2000	0.25	0.5	51.7	27
2EZ75D5	75	6.7	90	2000	0.25	0.5	56	24
2EZ82D5	82	6.1	100	3000	0.25	0.5	62.2	22
2EZ91D5	91	5.5	125	3000	0.25	0.5	69.2	20
2EZ100D5	100	5	175	3000	0.25	0.5	76	18
2EZ110D5	110	4.5	250	4000	0.25	0.5	83.6	17
2EZ120D5	120	4.2	325	4500	0.25	0.5	91.2	15
2EZ130D5	130	3.8	400	5000	0.25	0.5	98.8	14
2EZ140D5	140	3.6	500	5500	0.25	0.5	106.4	13
2EZ150D5	150	3.3	575	6000	0.25	0.5	114	12
2EZ160D5	160	3.1	650	6500	0.25	0.5	121.6	11
2EZ170D5	170	2.9	675	7000	0.25	0.5	130.4	11
2EZ180D5	180	2.8	725	7000	0.25	0.5	136.8	10
2EZ190D5	190	2.6	825	8000	0.25	0.5	144.8	10
2EZ200D5	200	2.5	1900	9990	0.25	0.5	152	9
2EZ220D5	220	2.0	2000	8500	0.25	0.5	167	8
2EZ270D5	270	1.6	2200	8500	0.25	0.5	205	6.7
2EZ300D5	300	1.5	2200	9000	0.25	0.5	228	5.9
2EZ330D5	330	1.4	2300	9000	0.25	0.5	250	5.4

Notes:

(1) The type number listed have a standard tolerance on the nominal zener voltage of ±5%

(2) The reverse surge current is a non-repetitive,8.3ms pulse width square wave or equivalent sine-wave superimposed on IZT per JEDEC method

5. 特性曲線 Rating & Characteristic Curves

Fig. 1 Power Temperature Derating Curve

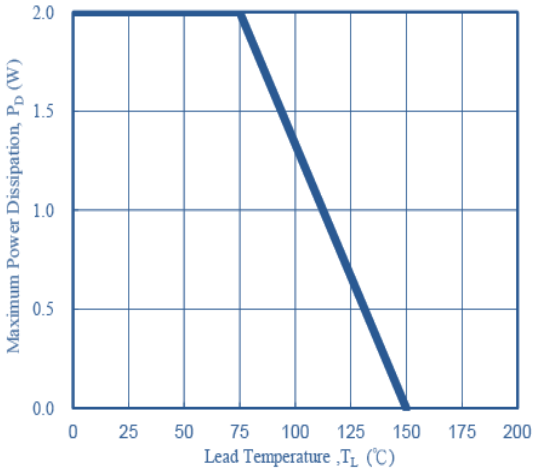


Fig. 2 Temperature Coefficients vs. Zener Voltage

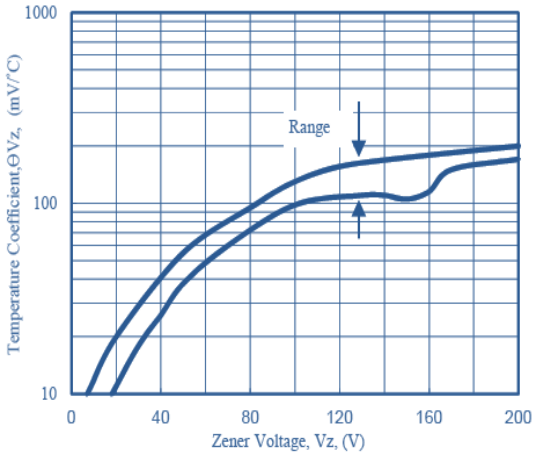


Fig. 3 Typical Thermal Resistance vs. Lead Length

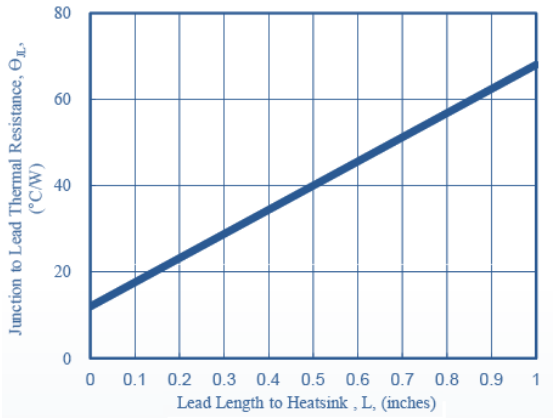


Fig. 4 Max. Surge Power

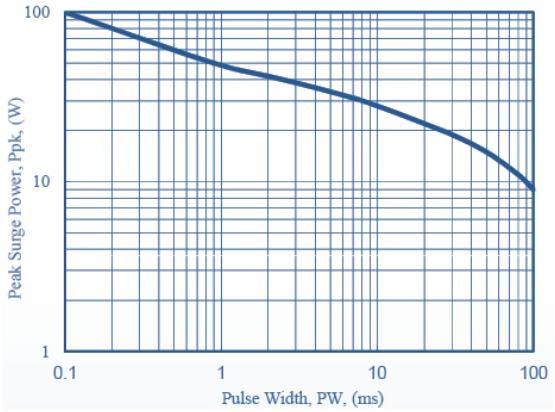


Fig. 5 Typical Thermal Response L, Lead=3/8inch