Micro Commercial Components
20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

2EZ11D5 THRU 2EZ200D5

2 W Glass Passivated Junction Silicon Zener Diode 11-200 Volts

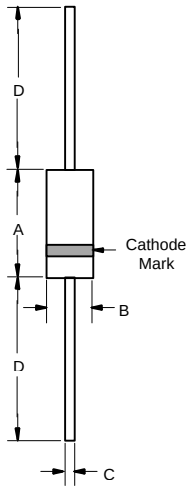
Features

- Low Profile Package
- Built-in Strain Relief
- Glass Passivated Junction
- Low Inductance
- Excellent Clamping Capability

Mechanical Data

- CASE: JEDEC DO-15 Molded plastic over passivated junction
- WEIGHT: 0.015 ounce, 0.04 gram
- TERMINALS : Solder plated, solderable per MIL-STD-750, method 2026
- POLARITY : Color band denotes positive end (cathode)

DO-15



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.230	0.300	5.80	7.60	
B	0.104	0.140	2.60	3.60	
C	0.028	0.034	0.71	0.86	
D	1.000	-----	25.40	-----	

Maximum Ratings @ 25°C Unless Otherwise Specified

Peak Pulse Power Dissipation (Note A) Derate above 75°C	P_D	2 24	Watts mW/°C
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) (Note B)	I_{FSM}	15	Amps
Operating And Storage Temperature Range	T_J, T_{STG}	-55°C to +150°C	

NOTES:

A. Mounted on 5.0mm^2(.013mm thick) land areas.

B. Measured on 8.3ms, single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum.

2EZ11D5 THRU 2EZ200D5

ELECTRICAL CHARACTERISTICS (T_A=25 ¢J unless otherwise noted) V_F=1.2 V max , I_F=500 mA for all types

Type No. (Note 1.)	Nominal Zener Voltage Vz @ I_{ZT} volts (Note 2.)	Test current I_{ZT} mA	Maximum Zener Impedance (Note 3.)			Leakage Current		Maximum Zener Current I_{ZM} Madc	Surge Current @ T_A = 25 ¢J ir - mA (Note 4.)
			Z_{ZT} @ I_{ZT} Ohms	Z_{Zk} @ I_{ZK} Ohms	I_{ZK} mA	I_R £g A Max @	V_R Volts		
2EZ11D5	11.0	45.5	4.0	700	0.25	1.0	8.4	166	1.82
2EZ12D5	12.0	41.5	4.5	700	0.25	1.0	9.1	152	1.66
2EZ13D5	13.0	38.5	5.0	700	0.25	0.5	9.9	138	1.54
2EZ14D5	14.0	35.7	5.5	700	0.25	0.5	10.6	130	1.43
2EZ15D5	15.0	33.4	7.0	700	0.25	0.5	11.4	122	1.33
2EZ16D5	16.0	31.2	8.0	700	0.25	0.5	12.2	114	1.25
2EZ17D5	17.0	29.4	9.0	750	0.25	0.5	13.0	107	1.18
2EZ18D5	18.0	27.8	10.0	750	0.25	0.5	13.7	100	1.11
2EZ19D5	19.0	26.3	11.0	750	0.25	0.5	14.4	95	1.05
2EZ20D5	20.0	25.0	11.0	750	0.25	0.5	15.2	90	1.00
2EZ22D5	22.0	22.8	12.0	750	0.25	0.5	16.7	82	0.91
2EZ24D5	24.0	20.8	13.0	750	0.25	0.5	18.2	76	0.83
2EZ27D5	27.0	18.5	18.0	750	0.25	0.5	20.6	68	0.74
2EZ30D5	30.0	16.6	20.0	1000	0.25	0.5	22.5	60	0.67
2EZ33D5	33.0	15.1	23.0	1000	0.25	0.5	25.1	55	0.61
2EZ36D5	36.0	13.9	25.0	1000	0.25	0.5	27.4	50	0.56
2EZ39D5	39.0	12.8	30.0	1000	0.25	0.5	29.7	47	0.51
2EZ43D5	43.0	11.6	35.0	1500	0.25	0.5	32.7	43	0.45
2EZ47D5	47.0	10.6	40.0	1500	0.25	0.5	35.8	39	0.42
2EZ51D5	51.0	9.8	48.0	1500	0.25	0.5	38.8	36	0.39
2EZ56D5	56.0	9.0	55.0	2000	0.25	0.5	42.6	32	0.36
2EZ62D5	62.0	8.1	60.0	2000	0.25	0.5	47.1	29	0.32
2EZ68D5	68.0	7.4	75.0	2000	0.25	0.5	51.7	27	0.29
2EZ75D5	75.0	6.7	90.0	2000	0.25	0.5	56.0	24	0.27
2EZ82D5	82.0	6.1	100.0	3000	0.25	0.5	62.2	22	0.24
2EZ91D5	91.0	5.5	125.0	3000	0.25	0.5	69.2	20	0.22
2EZ100D5	100.0	5.0	175.0	3000	0.25	0.5	76.0	18	0.20
2EZ110D5	110.0	4.5	250.0	4000	0.25	0.5	83.6	17	0.18
2EZ120D5	120.0	4.2	325.0	4500	0.25	0.5	91.2	15	0.16
2EZ130D5	130.0	3.8	400.0	5000	0.25	0.5	98.8	14	0.15
2EZ140D5	140.0	3.6	500.0	5500	0.25	0.5	106.4	13	0.14
2EZ150D5	150.0	3.3	575.0	6000	0.25	0.5	114.0	12	0.13
2EZ160D5	160.0	3.1	650.0	6500	0.25	0.5	121.6	11	0.12
2EZ170D5	170.0	2.9	675.0	7000	0.25	0.5	130.4	11	0.12
2EZ180D5	180.0	2.8	725.0	7000	0.25	0.5	136.8	10	0.11
2EZ190D5	190.0	2.6	825.0	8000	0.25	0.5	144.8	10	0.10
2EZ200D5	200.0	2.5	900.0	8000	0.25	0.5	152.0	9	0.10

NOTES:

1. TOLERANCES - Suffix indicates 5% tolerance any other tolerance will be considered as a special device.
2. ZENER VOLTAGE (Vz) MEASUREMENT - guarantees the zener voltage when measured at 40 ms ¡Ó 10ms from the diode body, and an ambient temperature of 25 ¢J (¡Ï 68 ¢J, -2 ¢J).
3. ZENER IMPEDANCE (Zz) DERIVATION - The zener impedance is derived from the 60 cycle ac voltage, which results when an ac current having an rms falue equal to 10% of the dc zener current (I_{ZT} or I_{ZK}) is superimposed on I_{ZT} or I_{ZK}.
4. SURGE CURRENT (Ir) NON-REPETITIVE - The rating listed in the electrical characteristics table is maximum peak, non-repetitive, reverse surge current of 1/2 square wave or equivalent sine wave pulse of 1/120 second duration superimposed on the test current, I_{ZT}, per JEDEC standards, however, actual device capability is as described in Figure 3.

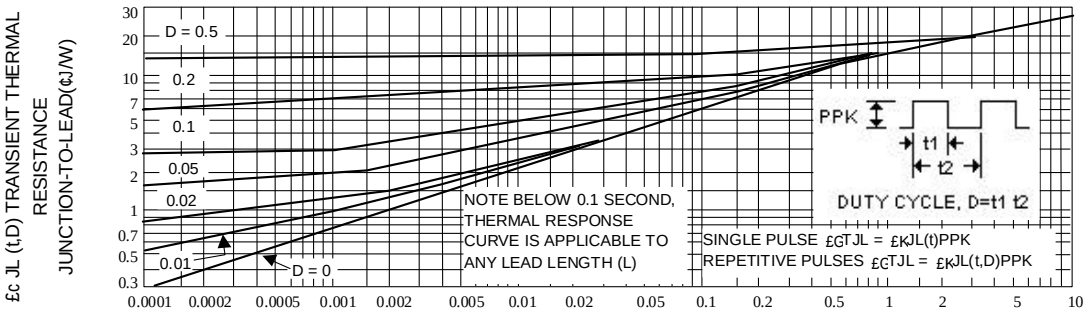


Fig. 2-TYPICAL THERMAL RESPONSE L,

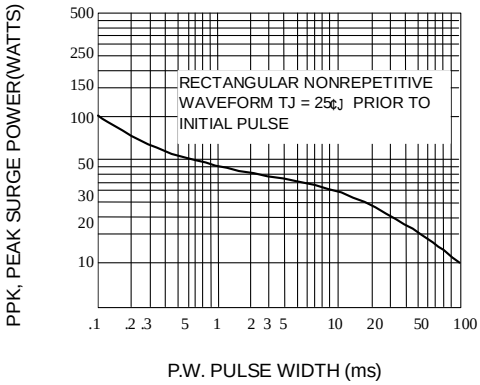


Fig. 3-MAXIMUM SURGE POWER

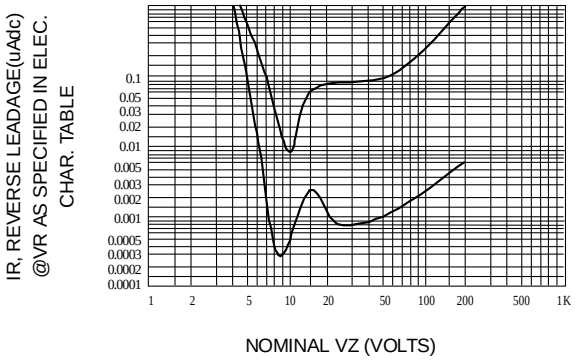


Fig. 4-TYPICAL REVERSE LEAKAGE

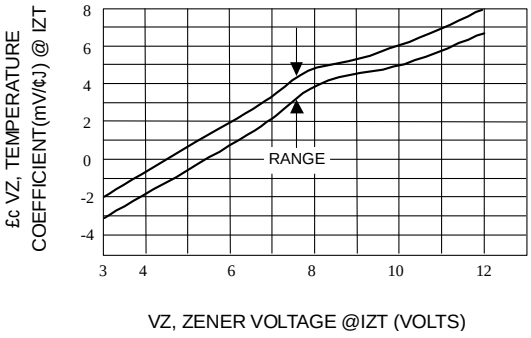


Fig. 5-UNITS TO 12 VOLTS

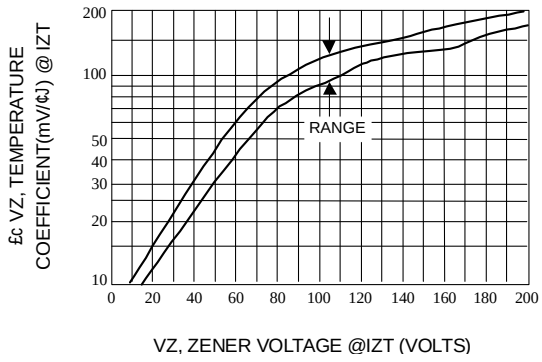


Fig. 6-UNITS 10 TO 200 VOLTS

RATING AND CHARACTERISTICS CURVES

2EZ11D5 THRU 2EZ200D5

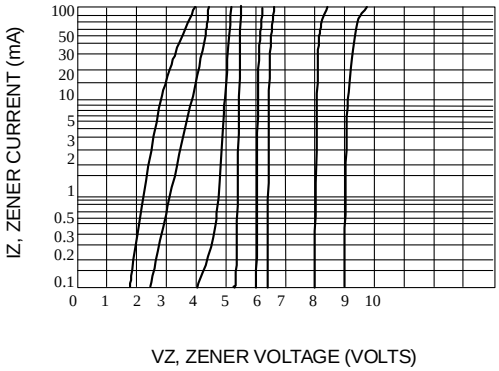


Fig. 7-VZ = 3.9 THRU 10 VOLTS

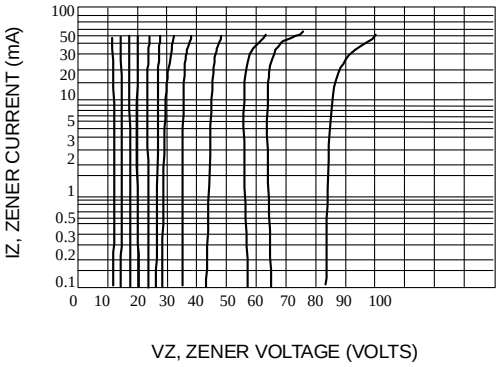


Fig. 8-VZ = 12 THRU 82 VOLTS

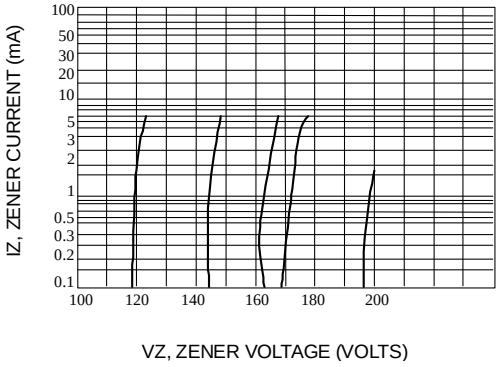


Fig. 9-VZ = 100 THRU 200 VOLTS

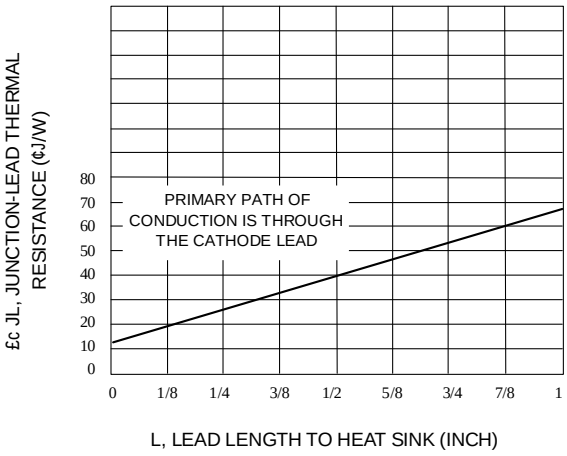


Fig. 10-TYPICAL THERMAL RESISTANCE