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2EZ5.6D5 THRU 2EZ75D5

2 W Glass Passivated Junction Silicon Zener Diode 5.6-75 Volts

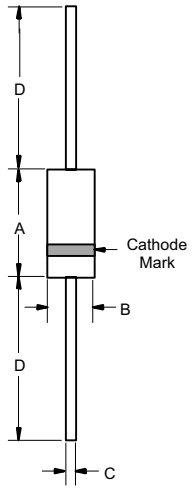
Features

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

Mechanical Data

- CASE: JEDEC DO-41 Molded plastic over passivated junction
- WEIGHT: 0.012 ounce, 0.34 gram
- TERMINALS : Solder plated, solderable per MIL-STD-750, method 2026
- POLARITY : Color band denotes positive end (cathode)

DO-41



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.166	.205	4.10	5.20	
B	.080	.107	2.00	2.70	
C	.028	.034	.70	.90	
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.

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ELECTRICAL CHARACTERISTICS (T_A=25°C 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} m A	Surge Current @ T_A = 25°C Izsm - A (Note 4.)
			Z_{ZT} @ I_{ZT} Ohms	Z_{ZK} @ I_{ZK} Ohms	I_{ZK} mA	I_R uA Max	V_R Volts		
2EZ5.6D5	5.6	89.5	2.5	500	1	5	2	324	3.3
2EZ6.2D5	6.2	80.5	1.5	700	1	5	3	292	3.1
2EZ6.8D5	6.8	73.5	2	700	1	5	4	266	2.9
2EZ7.5D5	7.5	66.5	2	700	0.5	5	5	242	2.66
2EZ8.2D5	8.2	61	2.3	700	0.5	5	6	220	2.44
2EZ9.1D5	9.1	55	2.5	700	0.5	3	7	200	2.2
2EZ10D5	10	50	3.5	700	0.25	3	7.6	182	2
2EZ11D5	5.6	45.5	4	700	0.25	1	8.4	166	1.82
2EZ12D5	12	41.5	4.5	700	0.25	0.5	9.1	152	1.66
2EZ13D5	13	38.5	5	700	0.25	0.5	9.9	138	1.54
2EZ14D5	14	35.7	5.5	700	0.25	0.5	10.6	130	1.43
2EZ15D5	15	33.4	7	700	0.25	0.5	11.4	122	1.33
2EZ16D5	16	31.2	8	700	0.25	0.5	12.2	114	1.25
2EZ17D5	17	29.4	9	750	0.25	0.5	13	107	1.18
2EZ11D5	11	45.5	4	700	0.25	1	8.4	166	1.82
2EZ12D5	12	41.5	4.5	700	0.25	1	9.1	152	1.66
2EZ13D5	13	38.5	5	700	0.25	0.5	9.9	138	1.54
2EZ14D5	14	35.7	5.5	700	0.25	0.5	10.6	130	1.43
2EZ15D5	15	33.4	7	700	0.25	0.5	11.4	122	1.33
2EZ16D5	16	31.2	8	700	0.25	0.5	12.2	114	1.25
2EZ17D5	17	29.4	9	750	0.25	0.5	13	107	1.18
2EZ18D5	18	27.8	10	750	0.25	0.5	13.7	100	1.11
2EZ19D5	19	26.3	11	750	0.25	0.5	14.4	95	1.05
2EZ20D5	20	25	11	750	0.25	0.5	15.2	90	1
2EZ22D5	22	22.8	12	750	0.25	0.5	16.7	82	0.91
2EZ24D5	24	20.8	13	750	0.25	0.5	18.2	76	0.83
2EZ27D5	27	18.5	18	750	0.25	0.5	20.6	68	0.74
2EZ30D5	30	16.6	20	1000	0.25	0.5	22.5	60	0.67
2EZ33D5	33	15.1	23	1000	0.25	0.5	25.1	55	0.61
2EZ36D5	36	13.9	25	1000	0.25	0.5	27.4	50	0.56
2EZ39D5	39	12.8	30	1000	0.25	0.5	29.7	47	0.51
2EZ43D5	43	11.6	35	1500	0.25	0.5	32.7	43	0.45
2EZ47D5	47	10.6	40	1500	0.25	0.5	35.8	39	0.42
2EZ51D5	51	9.8	48	1500	0.25	0.5	38.8	36	0.39
2EZ56D5	56	9	55	2000	0.25	0.5	42.6	32	0.36
2EZ62D5	62	8.1	60	2000	0.25	0.5	47.1	29	0.32
2EZ68D5	68	7.4	75	2000	0.25	0.5	51.7	27	0.29
2EZ75D5	75	6.7	90	2000	0.25	0.5	56	24	0.27

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 from the diode body, and an ambient temperature of 25
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 (Izsm) 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.

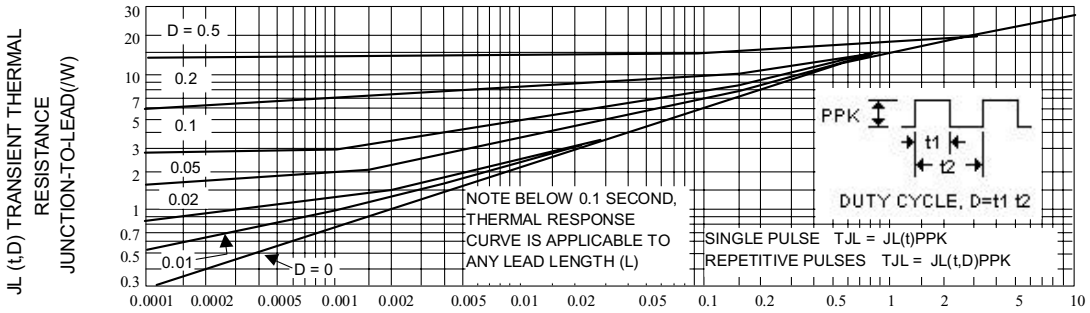

Fig. 2-TYPICAL THERMAL RESPONSE

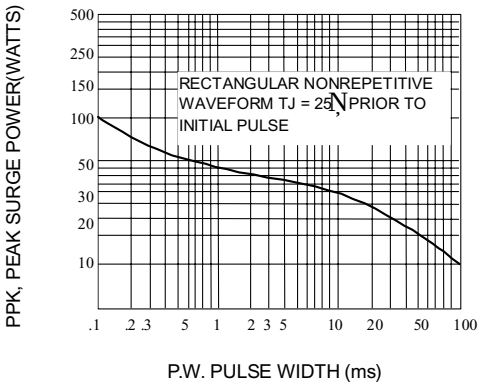

Fig. 3-MAXIMUM SURGE POWER

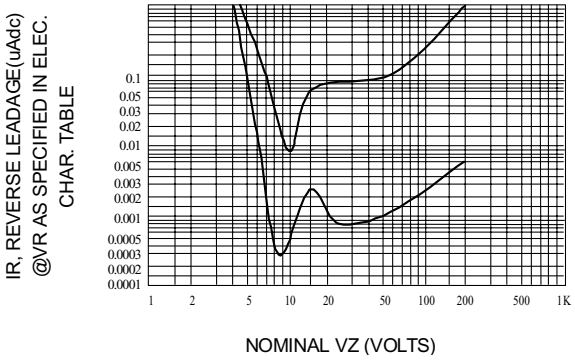

Fig. 4-TYPICAL REVERSE LEAKAGE

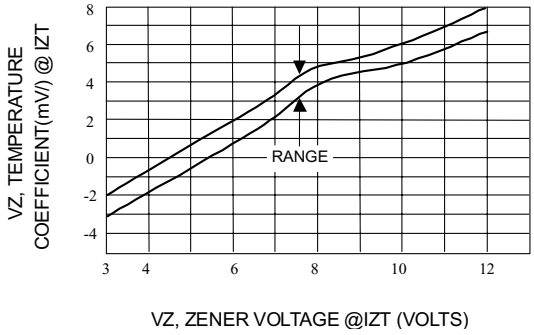

Fig. 5-UNITS 3.9 TO 12 VOLTS

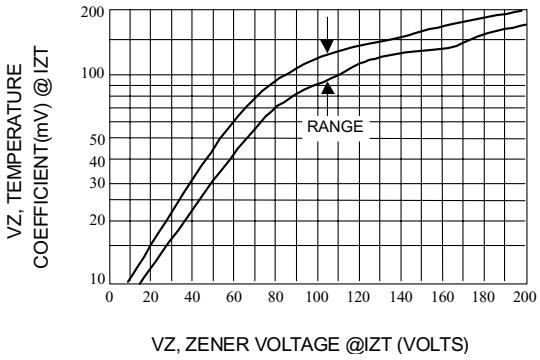

Fig. 6-UNITS 10 TO 200 VOLTS

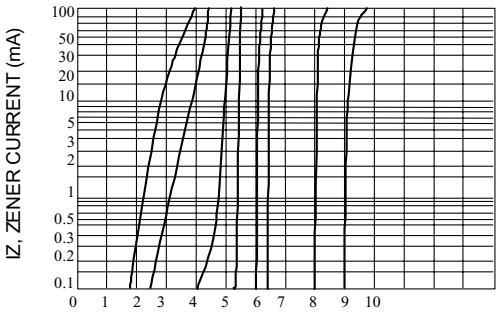

Fig. 7-VZ = 3.9 THRU 10 VOLTS

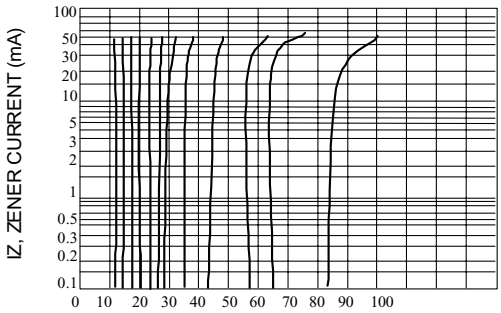

Fig. 8-VZ = 12 THRU 82 VOLTS

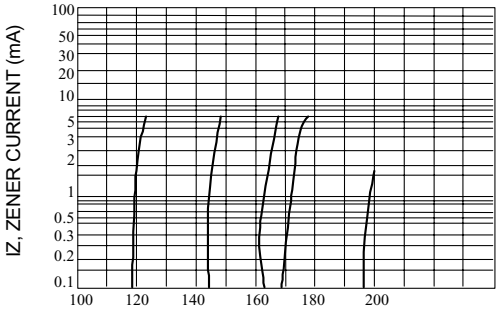

Fig. 9-VZ = 100 THRU 200 VOLTS

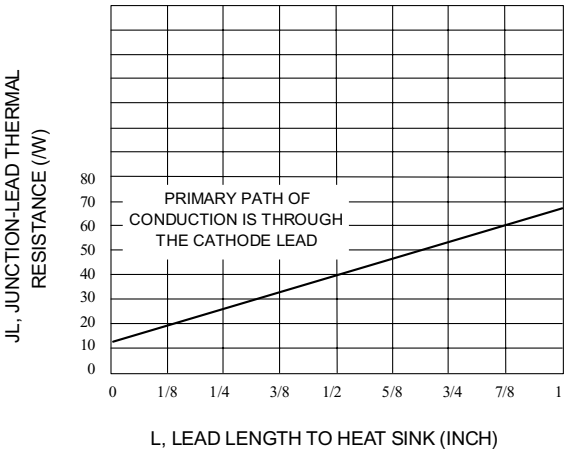

Fig. 10-TYPICAL THERMAL RESISTANCE

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