THE DATASHEET OF

2EZ30D5-TP

Micro Commercial Components

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2EZ5.1D5 THRU 2EZ75D5

2 W Glass Passivated Junction Silicon Zener Diode 5.1-75 Volts

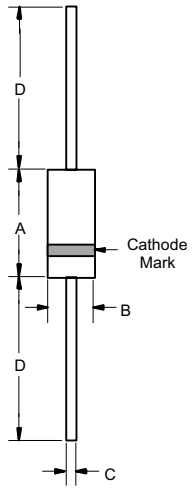
Features

- Glass Passivation Junction
- Lead Free Finish/RoHS Compliant (Note C) ("P"Suffix designates Compliant. See ordering information)
- Excellent Clamping Capability
- Halogen free available upon request by adding suffix "-HF"

Mechanical Data

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- 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

Steady Power Dissipation (Note A) Derate above 75°C	P_D	2 36	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.

C. High Temperature Solder Exemption Applied, see EU Directive Annex 7.

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ELECTRICAL CHARACTERISTICS (T_A=25^{0}C unless otherwise noted) V_F=1.2 V max , I_F=200 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
			Z_{ZT} @ I_{ZT} Ohms	Z_{ZK} @ I_{ZK} Ohms	I_{ZK} mA	I_R µA Max	V_R Volts	
2EZ5.1D5	5.1	98	3.5	600	1	5.0	1.0	356
2EZ5.6D5	5.6	89.5	2.5	500	1	5.0	2.0	324
2EZ6.2D5	6.2	80.5	1.5	700	1	5.0	3.0	292
2EZ6.8D5	6.8	73.5	2.0	700	1	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	2.3	700	0.5	5.0	6.0	220
2EZ9.1D5	9.1	55	2.5	700	0.5	3.0	7.0	200
2EZ10D5	10	50	3.5	700	0.25	3.0	7.6	182
2EZ11D5	11	45.5	4.0	700	0.25	1.0	8.4	166
2EZ12D5	12	41.5	4.5	700	0.25	1.0	9.1	152
2EZ13D5	13	38.5	5.0	700	0.25	0.5	9.9	138
2EZ14D5	14	35.7	5.5	700	0.25	0.5	10.6	130
2EZ15D5	15	33.4	7.0	700	0.25	0.5	11.4	122
2EZ16D5	16	31.2	8.0	700	0.25	0.5	12.2	114
2EZ17D5	17	29.4	9.0	750	0.25	0.5	13.0	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	9.0	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	56.0	24

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}

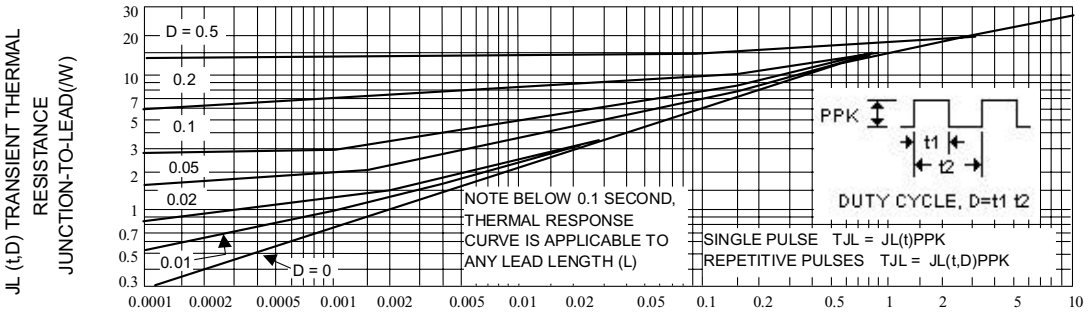

Fig. 1-TYPICAL THERMAL RESPONSE

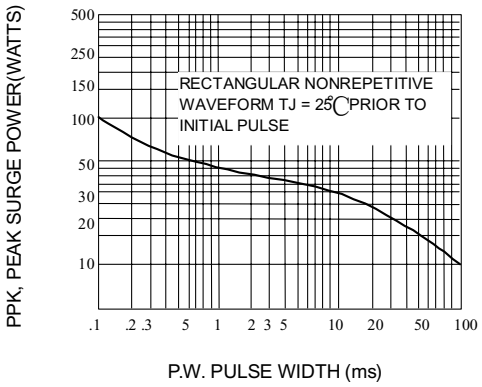

Fig. 2-MAXIMUM SURGE POWER

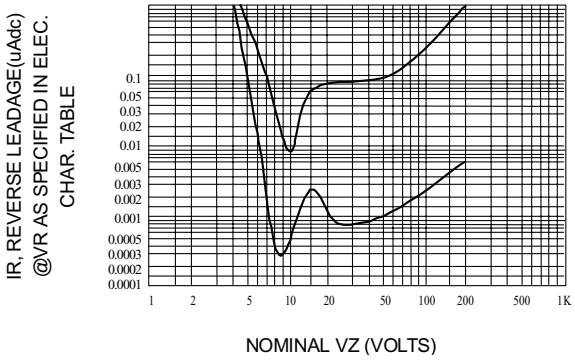

Fig. 3-TYPICAL REVERSE LEAKAGE

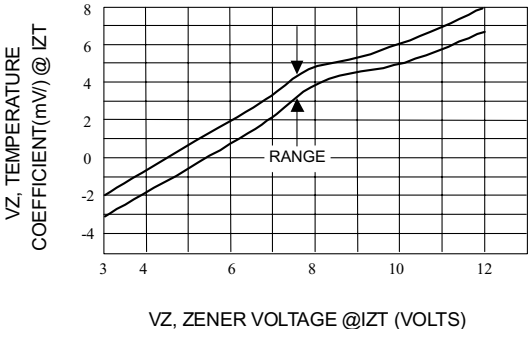

Fig. 4-UNITS 3.9 TO 12 VOLTS

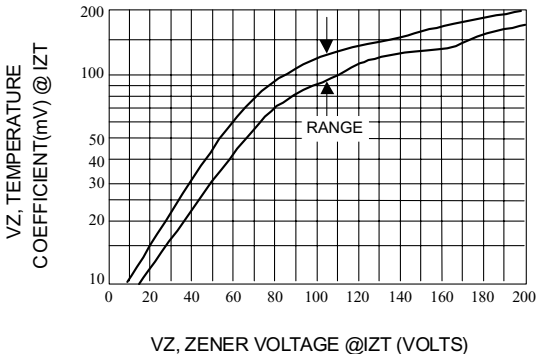

Fig. 5-UNITS 10 TO 200 VOLTS

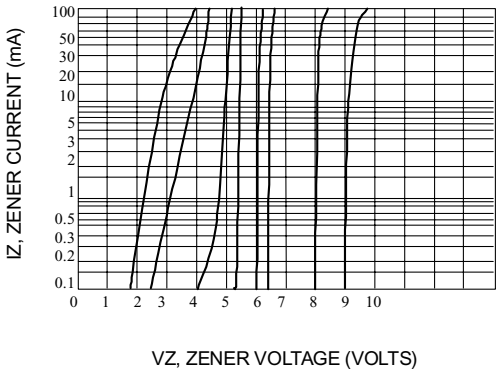

Fig. 6-VZ = 3.9 THRU 10 VOLTS

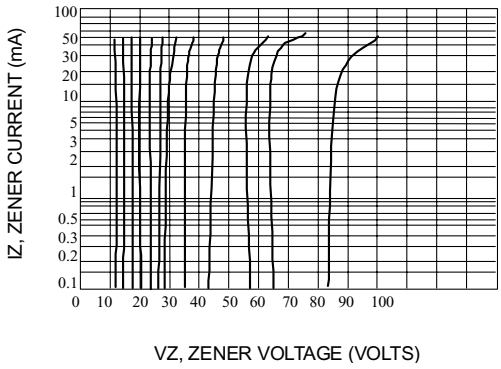

Fig. 7-VZ = 12 THRU 82 VOLTS

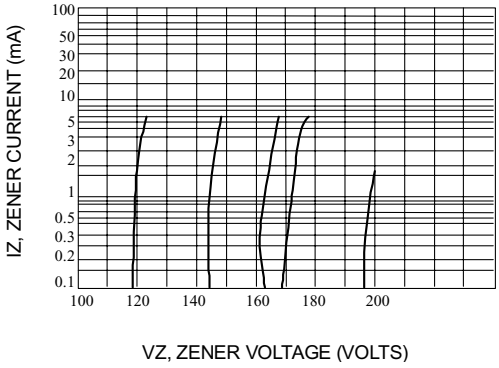

Fig. 8-VZ = 100 THRU 200 VOLTS

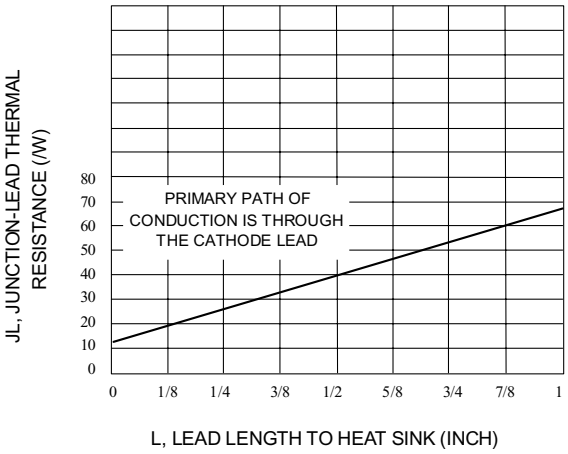

Fig. 9-TYPICAL THERMAL RESISTANCE

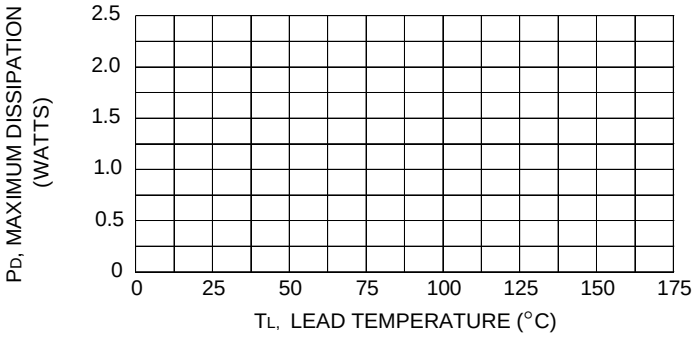

Fig. 10- POWER TEMPERATURE DERATING CURVE

Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 5Kpcs/Reel
Part Number-AP	Ammo Packing: 5Kpcs/Ammo Box
Part Number-BP	Bulk: 50Kpcs/Carton

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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