THE DATASHEET OF

3EZ19D5-TP

Micro Commercial Components

Micro Commercial Components
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3EZ5.1D5 THRU 3EZ75D5

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

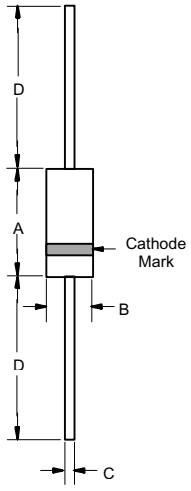
Features

- Low Profile Package
- Glass Passivated Junction
- Excellent Clamping Capability
- Lead Free Finish/RoHS Compliant(Note C)("P" Suffix Designates Compliant. See Ordering Information)
- Halogen free available upon request by adding suffix "-HF"

Mechanical Data

- WEIGHT: 0.015 ounce, 0.04 gram
- Marking : Cathode band and type number
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

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	0.026	0.034	0.70	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	3 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.

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} Volte (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	
3EZ5.1D5	5.1	147	3.5	550	1.0	5	1.0	520
3EZ5.6D5	5.6	134	2.5	600	1.0	5	2.0	480
3EZ6.2D5	6.2	121	1.5	700	1.0	5	3.0	435
3EZ6.8D5	6.8	110	2.0	700	1.0	5	4.0	393
3EZ7.5D5	7.5	100	2.0	700	0.5	5	5.0	360
3EZ8.2D5	8.2	91	2.3	700	0.5	5	6.0	330
3EZ9.1D5	9.1	82	2.5	700	0.5	3	7.0	297
3EZ10D5	10	75	3.5	700	0.25	3	7.6	270
3EZ11D5	11	68	4	700	0.25	1	8.4	225
3EZ12D5	12	63	4.5	700	0.25	1	9.4	246
3EZ13D5	13	58	4.5	700	0.25	0.5	9.9	208
3EZ14D5	14	53	5	700	0.25	0.5	10.6	193
3EZ15D5	15	50	5.5	700	0.25	0.5	11.4	180
3EZ16D5	16	47	5.5	700	0.25	0.5	12.2	169
3EZ17D5	17	44	6	750	0.25	0.5	13	159
3EZ18D5	18	42	6	750	0.25	0.5	13.7	150
3EZ19D5	19	40	7	750	0.25	0.5	14.4	142
3EZ20D5	20	37	7	750	0.25	0.5	15.2	135
3EZ22D5	22	34	8	750	0.25	0.5	16.7	123
3EZ24D5	24	31	9	750	0.25	0.5	18.2	112
3EZ27D5	27	28	10	750	0.25	0.5	20.6	100
3EZ28D5	28	27	12	750	0.25	0.5	21	96
3EZ30D5	30	25	16	1000	0.25	0.5	22.5	90
3EZ33D5	33	23	20	1000	0.25	0.5	25.1	82
3EZ36D5	36	21	22	1000	0.25	0.5	27.4	75
3EZ39D5	39	19	28	1000	0.25	0.5	29.7	69
3EZ43D5	43	17	33	1500	0.25	0.5	32.7	63
3EZ47D5	47	16	38	1500	0.25	0.5	35.6	57
3EZ51D5	51	15	45	1500	0.25	0.5	38.8	53
3EZ56D5	56	13	50	2000	0.25	0.5	42.6	48
3EZ62D5	62	12	55	2000	0.25	0.5	47.1	44
3EZ68D5	68	11	70	2000	0.25	0.5	51.7	40
3EZ75D5	75	10	85	2000	0.25	0.5	56.0	36

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})is

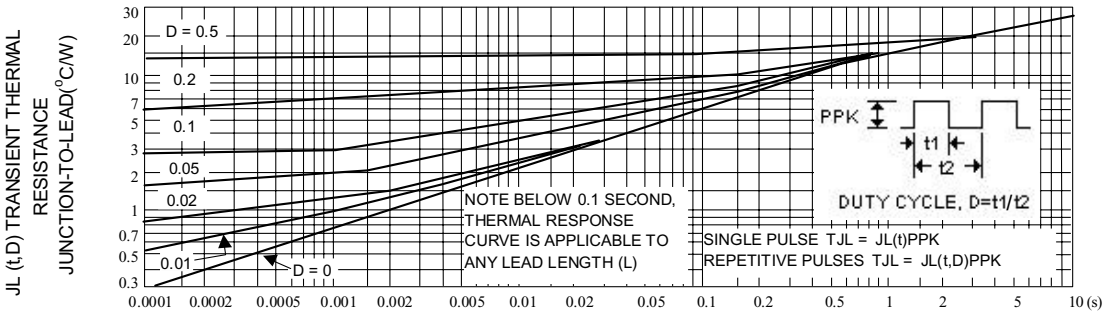

Fig. 2-TYPICAL THERMAL RESPONSE L,

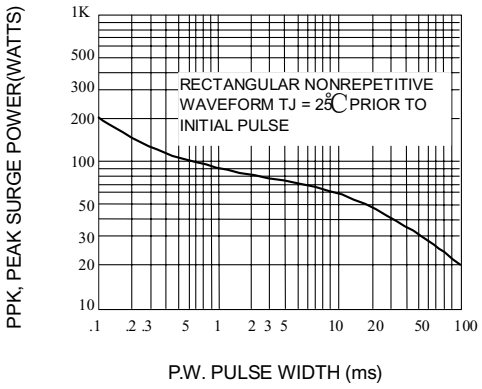

Fig. 3-MAXIMUM SURGE POWER

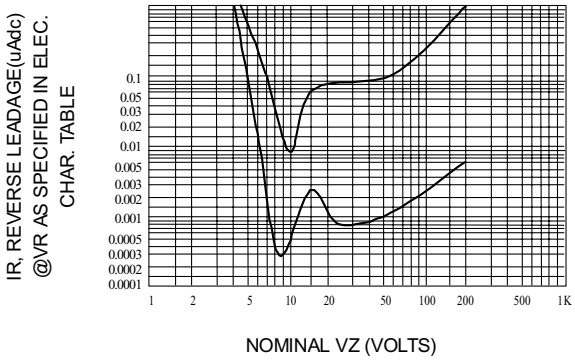

Fig. 4-TYPICAL REVERSE LEAKAGE

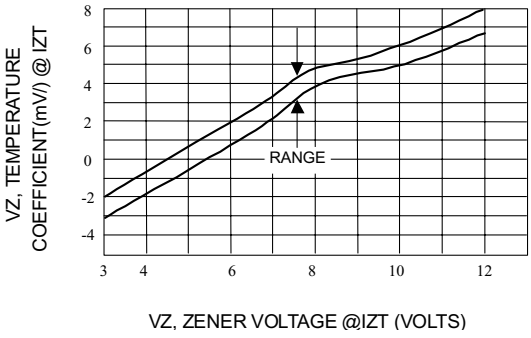

Fig. 5-UNITS TO 12 VOLTS

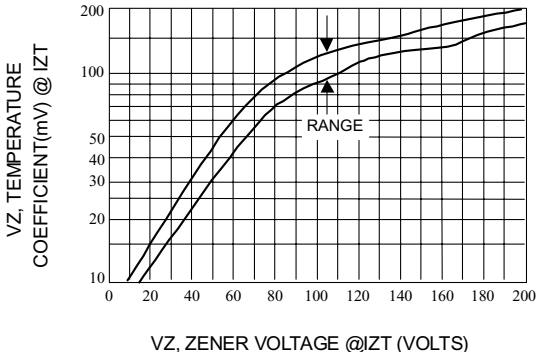

Fig. 6-UNITS 10 TO 200 VOLTS

RATING AND CHARACTERISTICS CURVES

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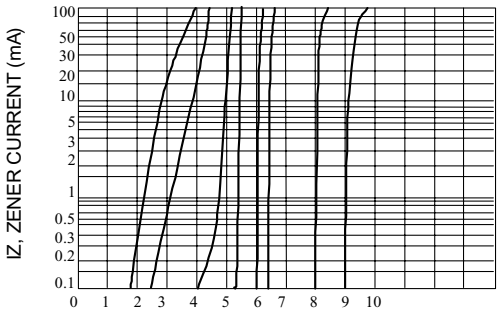

Fig. 7-VZ = 3.9 THRU 10 VOLTS

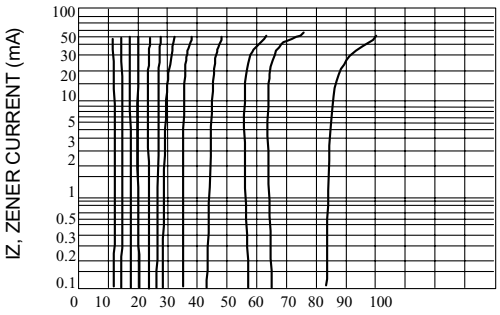

Fig. 8-VZ = 12 THRU 82 VOLTS

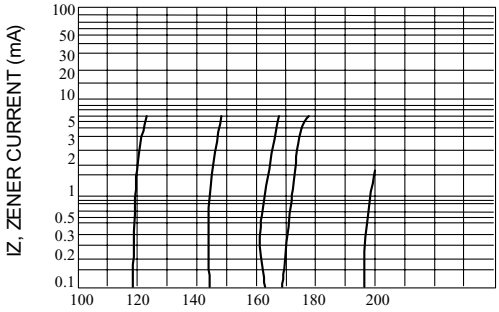

Fig. 9-VZ = 100 THRU 200 VOLTS

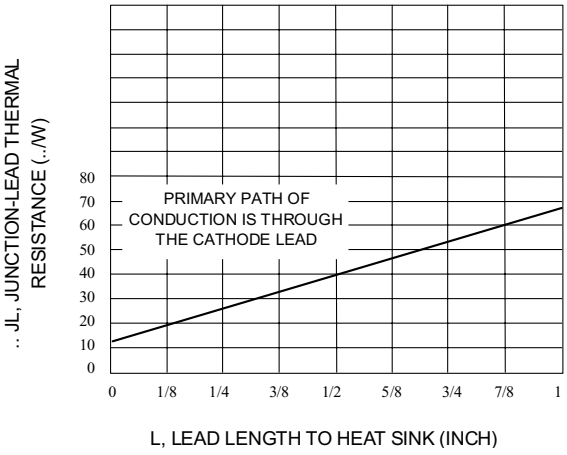

Fig. 10-TYPICAL THERMAL RESISTANCE

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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 4Kpcs/Reel
Part Number-AP	Ammo Packing: 3Kpcs/Ammo Box
Part Number-BP	Bulk: 25Kpcs/Carton

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

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