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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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Micro Commercial Components



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3EZ5.1D5
THRU
3EZ75D5

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

Maximum Ratings @ 25°C Unless Otherwise Specified

Table with 4 columns: Parameter, Symbol, Value, Units. Rows include Peak Pulse Power Dissipation (Pd), Peak Forward Surge Current (IFSM), and Operating And Storage Temperature Range (Tj, Tstg).

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.

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

DO-15

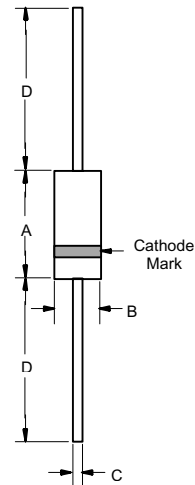


Table titled DIMENSIONS with columns for DIM, INCHES (MIN, MAX), MM (MIN, MAX), and NOTE. Rows A, B, C, and D correspond to the dimensions in the diagram.

3EZ5.1D5 THRU 3EZ75D5

 ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ unless otherwise noted) $V_F=1.2\text{ V max}$, $I_F=200\text{ mA}$ for all types

| Type No. (Note 1.) | Nominal Zener Voltage $V_Z @ I_{ZT}$ Volte (Note 2.) | Test current I_{ZT} mA | Maximum Zener Impedance (Note 3) | | | Leakage Current | | Maximum Zener Current I_{ZM} m A |
|-----------------------|------------------------------------------------------------------|-----------------------------------|----------------------------------|-------------------|----------|-------------------|-------|---------------------------------------------|
| | | | $Z_{ZT} @ I_{ZT}$ | $Z_{ZK} @ I_{ZK}$ | I_{ZK} | I_R | V_R | |
| | | | Ohms | Ohms | mA | $\mu\text{A Max}$ | 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 (V_Z) MEASUREMENT - guarantees the zener voltage when measured at 40 ms from the diode body, and an ambient temperature of 25
3. ZENER IMPEDANCE (Z_Z) DERIVATION - The zener impedance is derived from the 60 cycle ac voltage, which results when an ac current having an rms value equal to 10% of the dc zener current (I_{ZT} or I_{ZK}) is superimposed on I_{ZT} or I_{ZK} is

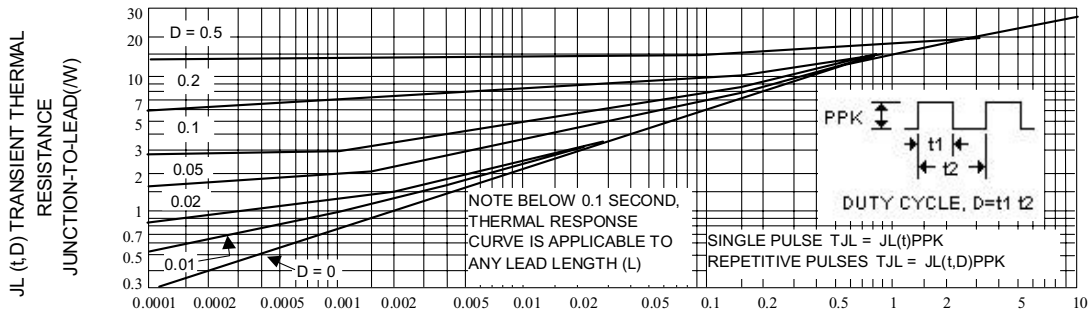


Fig. 2-TYPICAL THERMAL RESPONSE L,

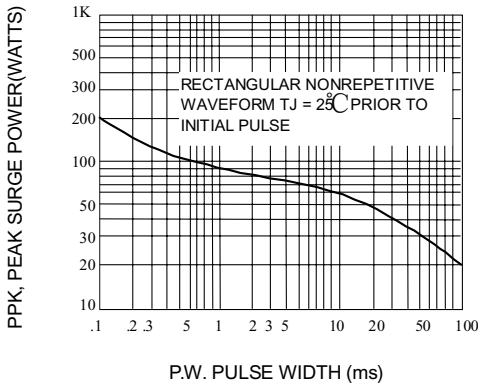


Fig. 3-MAXIMUM SURGE POWER

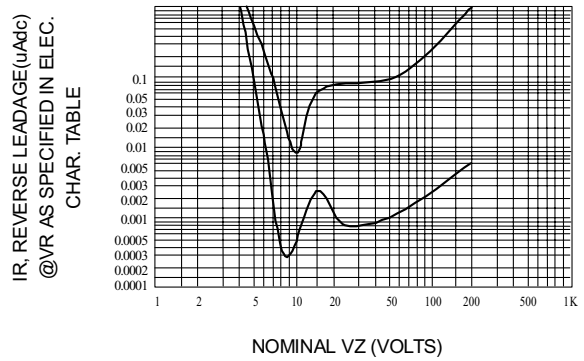


Fig. 4-TYPICAL REVERSE LEAKAGE

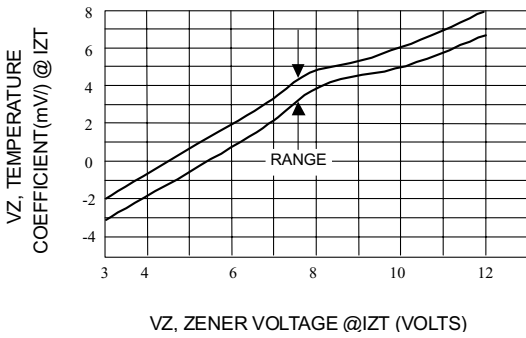


Fig. 5-UNITS TO 12 VOLTS

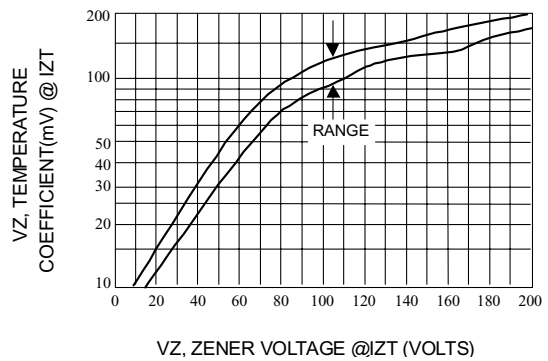


Fig. 6-UNITS 10 TO 200 VOLTS

RATING AND CHARACTERISTICS CURVES
3EZ5.1D5 THRU 3EZ75D5

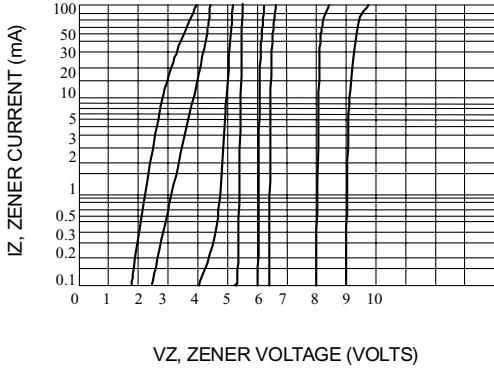


Fig. 7-V_Z = 3.9 THRU 10 VOLTS

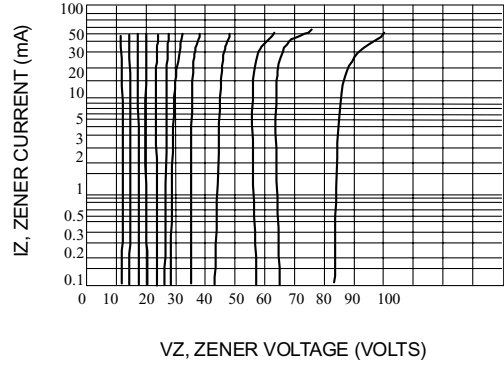


Fig. 8-V_Z = 12 THRU 82 VOLTS

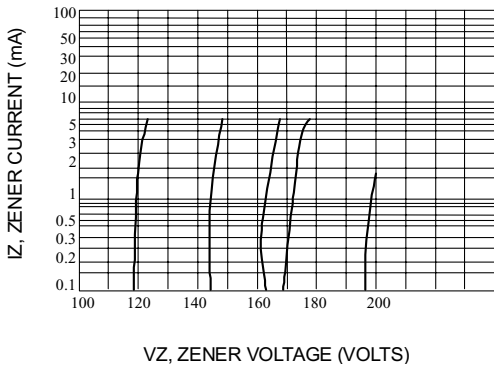


Fig. 9-V_Z = 100 THRU 200 VOLTS

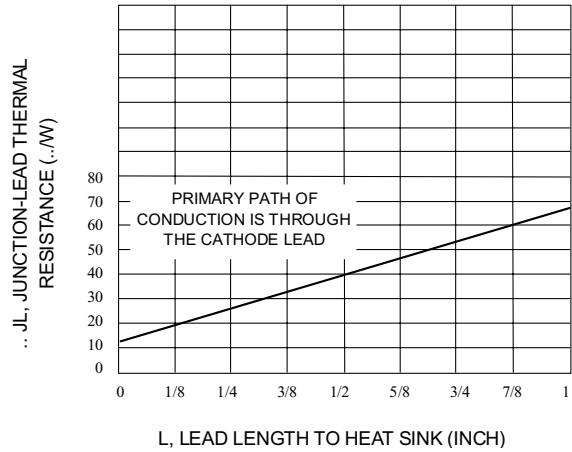


Fig. 10-TYPICAL THERMAL RESISTANCE



Micro Commercial Components

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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