

## ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified

| TYPE     | Nominal Zener Voltage            |                 | Maximum Zener Impedance           |                                   |                 | Maximum Reverse Leakage Current |      | Maximum DC Zener Current |
|----------|----------------------------------|-----------------|-----------------------------------|-----------------------------------|-----------------|---------------------------------|------|--------------------------|
|          | V <sub>Z</sub> @ I <sub>ZT</sub> | I <sub>ZT</sub> | Z <sub>zT</sub> @ I <sub>ZT</sub> | Z <sub>zK</sub> @ I <sub>zK</sub> | I <sub>zK</sub> | I <sub>R</sub> @ V <sub>R</sub> |      | I <sub>ZM</sub>          |
|          | (V)                              | (mA)            | (Ω)                               | (Ω)                               | (mA)            | (μA)                            | (V)  | (mA)                     |
| 3EZ3.9D5 | 3.9                              | 192             | 4.5                               | 400                               | 1.0             | 80                              | 1.0  | 630                      |
| 3EZ4.3D5 | 4.3                              | 174             | 4.5                               | 400                               | 1.0             | 30                              | 1.0  | 590                      |
| 3EZ4.7D5 | 4.7                              | 160             | 4.0                               | 500                               | 1.0             | 20                              | 1.0  | 550                      |
| 3EZ5.1D5 | 5.1                              | 147             | 3.5                               | 550                               | 1.0             | 5.0                             | 1.0  | 520                      |
| 3EZ5.6D5 | 5.6                              | 134             | 2.5                               | 600                               | 1.0             | 5.0                             | 2.0  | 480                      |
| 3EZ6.2D5 | 6.2                              | 121             | 1.5                               | 700                               | 1.0             | 5.0                             | 3.0  | 435                      |
| 3EZ6.8D5 | 6.8                              | 110             | 2.0                               | 700                               | 1.0             | 50                              | 4.0  | 393                      |
| 3EZ7.5D5 | 7.5                              | 100             | 2.0                               | 700                               | 0.5             | 50                              | 5.0  | 360                      |
| 3EZ8.2D5 | 8.2                              | 91              | 2.3                               | 700                               | 0.5             | 50                              | 6.0  | 330                      |
| 3EZ9.1D5 | 9.1                              | 82              | 2.5                               | 700                               | 0.5             | 50                              | 7.0  | 297                      |
| 3EZ10D5  | 10                               | 75              | 3.5                               | 700                               | 0.25            | 50                              | 7.6  | 270                      |
| 3EZ11D5  | 11                               | 68              | 4.0                               | 700                               | 0.25            | 50                              | 8.4  | 225                      |
| 3EZ12D5  | 12                               | 63              | 4.5                               | 700                               | 0.25            | 1.0                             | 9.1  | 246                      |
| 3EZ13D5  | 13                               | 58              | 4.5                               | 700                               | 0.25            | 0.5                             | 9.9  | 208                      |
| 3EZ14D5  | 14                               | 53              | 5.0                               | 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              | 6.0                               | 750                               | 0.25            | 0.5                             | 13.0 | 159                      |
| 3EZ18D5  | 18                               | 42              | 6.0                               | 750                               | 0.25            | 0.5                             | 13.7 | 150                      |
| 3EZ19D5  | 19                               | 40              | 7.0                               | 750                               | 0.25            | 0.5                             | 14.4 | 142                      |
| 3EZ20D5  | 20                               | 37              | 7.0                               | 750                               | 0.25            | 0.5                             | 15.2 | 135                      |
| 3EZ22D5  | 22                               | 34              | 8.0                               | 750                               | 0.25            | 0.5                             | 16.7 | 123                      |
| 3EZ24D5  | 24                               | 31              | 9.0                               | 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                             | 21.0 | 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                       |
| 3EZ82D5  | 82                               | 9.1             | 95                                | 3000                              | 0.25            | 0.5                             | 62.2 | 33                       |

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|----------|----------------------------------|-----------------|-----------------------------------|-----------------------------------|-----------------|---------------------------------|-------|--------------------------|
|          | V <sub>Z</sub> @ I <sub>ZT</sub> | I <sub>ZT</sub> | Z <sub>ZT</sub> @ I <sub>ZT</sub> | Z <sub>ZK</sub> @ I <sub>ZK</sub> | I <sub>ZK</sub> | I <sub>R</sub> @ V <sub>R</sub> |       |                          |
|          | (V)                              | (mA)            | (Ω)                               | (Ω)                               | (mA)            | (μA)                            | (V)   | (mA)                     |
| 3EZ91D5  | 91                               | 8.2             | 115                               | 3000                              | 0.25            | 0.5                             | 69.2  | 30                       |
| 3EZ100D5 | 100                              | 7.5             | 160                               | 3000                              | 0.25            | 0.5                             | 76.0  | 27                       |
| 3EZ110D5 | 110                              | 6.8             | 225                               | 4000                              | 0.25            | 0.5                             | 83.6  | 25                       |
| 3EZ120D5 | 120                              | 6.3             | 300                               | 4500                              | 0.25            | 0.5                             | 91.2  | 22                       |
| 3EZ130D5 | 130                              | 5.8             | 375                               | 5000                              | 0.25            | 0.5                             | 98.8  | 21                       |
| 3EZ140D5 | 140                              | 5.3             | 475                               | 5000                              | 0.25            | 0.5                             | 106.4 | 19                       |
| 3EZ150D5 | 150                              | 5.0             | 550                               | 6000                              | 0.25            | 0.5                             | 114.0 | 18                       |
| 3EZ160D5 | 160                              | 4.7             | 625                               | 6500                              | 0.25            | 0.5                             | 121.6 | 17                       |
| 3EZ170D5 | 170                              | 4.4             | 650                               | 7000                              | 0.25            | 0.5                             | 130.4 | 16                       |
| 3EZ180D5 | 180                              | 4.2             | 700                               | 7000                              | 0.25            | 0.5                             | 136.8 | 15                       |
| 3EZ190D5 | 190                              | 4.0             | 800                               | 8000                              | 0.25            | 0.5                             | 144.8 | 14                       |
| 3EZ200D5 | 200                              | 3.7             | 875                               | 8000                              | 0.25            | 0.5                             | 152.0 | 13                       |

### Notes :

- ( 1 ) Suffix " 5 " indicates  $\pm 5.0\%$  tolerance, suffix " 10 " indicates  $\pm 10.0\%$  tolerance.
- ( 2 ) " EZ " will be omitted in marking on the diode

Fig. 2 Maximum Surge Power

