

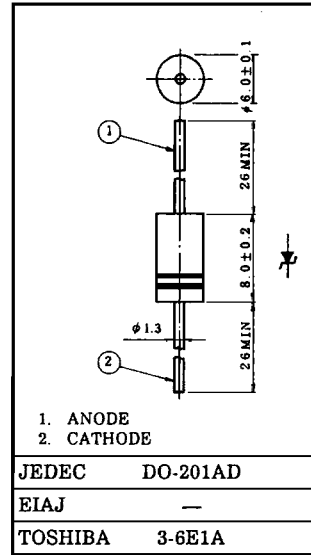
VOLTAGE DETECTOR AND SUPPRESSOR APPLICATIONS.

- Average Power Dissipation :  $P=3W$
- Peak Reverse Power Dissipation :  $PRSM=1500W/1ms\ expo$
- Zener Voltage :  $V_Z=12\sim390V$
- Tolerance of Zener Voltage :  $\pm 10\%$
- Plastic Mold Package

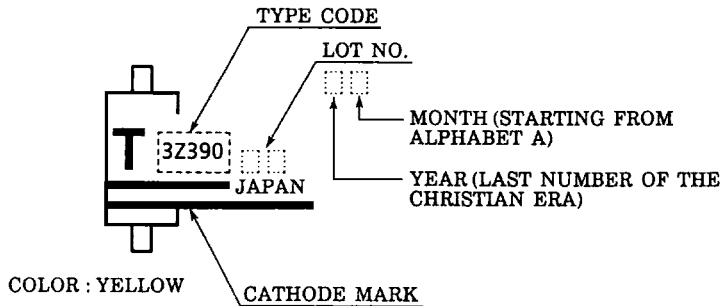
MAXIMUM RATINGS

| CHARACTERISTIC            | SYMBOL    | RATING  | UNIT |
|---------------------------|-----------|---------|------|
| Power Dissipation         | P         | 3.0     | W    |
| Junction Temperature      | $T_j$     | -40~150 | °C   |
| Storage Temperature Range | $T_{stg}$ | -40~150 | °C   |

Unit in mm



MARK



# 3Z12~3Z390

ELCTRICAL CHARACTERISTICS (Ta = 25°C)

| Type  | Zener Characteristics   |      |      |                                    |                                | Temperature Coefficient of Zener Voltage $Q_T$ (mV/°C) |      | Forward Voltage |                               | Reverse Current |                               |
|-------|-------------------------|------|------|------------------------------------|--------------------------------|--|------|-----------------|-------------------------------|-----------------|-------------------------------|
|       | Zener Voltage $V_Z$ (V) |      |      | Zener Impedance $r_d$ ( $\Omega$ ) | Measurement Current $I_Z$ (mA) | TYP.   | MAX. | MAX.            | Measurement Current $I_F$ (A) | MAX.            | Measurement Voltage $V_R$ (V) |
|       | MIN.                    | TYP. | MAX. | MAX.                               | $V_F$ (V)                      |  |      |                 |                               |                 |                               |
| 3Z12  | 10.8                    | 12   | 13.2 | 30                                 | 10                             | 8  | 13   | 1.2             | 0.2                           | 10              | 8                             |
| 3Z13  | 11.7                    | 13   | 14.3 | 30                                 | 10                             | 9  | 14   | 1.2             | 0.2                           | 10              | 9                             |
| 3Z15  | 13.5                    | 15   | 16.5 | 30                                 | 10                             | 11   | 17   | 1.2             | 0.2                           | 10              | 10                            |
| 3Z16  | 14.4                    | 16   | 17.6 | 30                                 | 10                             | 12   | 19   | 1.2             | 0.2                           | 10              | 11                            |
| 3Z18  | 16.2                    | 18   | 19.8 | 30                                 | 10                             | 14   | 23   | 1.2             | 0.2                           | 10              | 13                            |
| 3Z20  | 18.0                    | 20   | 22.0 | 30                                 | 10                             | 16   | 26   | 1.2             | 0.2                           | 10              | 14                            |
| 3Z22  | 19.8                    | 22   | 24.2 | 30                                 | 10                             | 18   | 28   | 1.2             | 0.2                           | 10              | 16                            |
| 3Z24  | 21.6                    | 24   | 26.4 | 30                                 | 10                             | 20   | 32   | 1.2             | 0.2                           | 10              | 17                            |
| 3Z27  | 24.3                    | 27   | 29.7 | 30                                 | 10                             | 23   | 36   | 1.2             | 0.2                           | 10              | 19                            |
| 3Z30  | 27.0                    | 30   | 33.0 | 30                                 | 10                             | 25   | 40   | 1.2             | 0.2                           | 10              | 21                            |
| 3Z33  | 29.7                    | 33   | 36.3 | 30                                 | 10                             | 26   | 41   | 1.2             | 0.2                           | 10              | 26.4                          |
| 3Z36  | 32.4                    | 36   | 39.6 | 30                                 | 9                              | 28   | 45   | 1.2             | 0.2                           | 10              | 28.8                          |
| 3Z43  | 38.7                    | 43   | 47.3 | 40                                 | 7                              | 33   | 53   | 1.2             | 0.2                           | 10              | 34.4                          |
| 3Z47  | 42.3                    | 47   | 51.7 | 65                                 | 6                              | 38   | 60   | 1.2             | 0.2                           | 10              | 37.6                          |
| 3Z51  | 45.9                    | 51   | 56.1 | 65                                 | 6                              | 43   | 68   | 1.2             | 0.2                           | 10              | 40.8                          |
| 3Z68  | 61.2                    | 68   | 74.8 | 120                                | 4                              | 57   | 90   | 1.2             | 0.2                           | 10              | 54.4                          |
| 3Z75  | 67.5                    | 75   | 82.5 | 150                                | 4                              | 66   | 104  | 1.2             | 0.2                           | 10              | 60                            |
| 3Z82  | 73.8                    | 82   | 90.2 | 170                                | 3                              | 71   | 113  | 1.2             | 0.2                           | 10              | 65.4                          |
| 3Z100 | 90                      | 100  | 110  | 300                                | 3                              | 87   | 138  | 1.2             | 0.2                           | 10              | 80                            |
| 3Z110 | 99                      | 110  | 121  | 300                                | 3                              | 96   | 152  | 1.2             | 0.2                           | 10              | 88                            |
| 3Z150 | 135                     | 150  | 165  | 450                                | 2                              | 136  | 212  | 1.2             | 0.2                           | 10              | 120                           |
| 3Z180 | 162                     | 180  | 198  | 500                                | 1.5                            | 161  | 255  | 1.2             | 0.2                           | 10              | 144                           |
| 3Z200 | 180                     | 200  | 220  | 500                                | 1.5                            | 170  | 269  | 1.2             | 0.2                           | 10              | 160                           |
| 3Z220 | 198                     | 220  | 242  | 5000                               | 0.5                            | 200  | 309  | 1.2             | 0.2                           | 10              | 176                           |
| 3Z240 | 216                     | 240  | 264  | 5000                               | 0.5                            | 215  | 343  | 1.2             | 0.2                           | 10              | 192                           |
| 3Z270 | 243                     | 270  | 297  | 5000                               | 0.5                            | 243  | 385  | 1.2             | 0.2                           | 10              | 216                           |
| 3Z300 | 270                     | 300  | 330  | 5000                               | 0.5                            | 270  | 428  | 1.2             | 0.2                           | 10              | 240                           |
| 3Z330 | 297                     | 330  | 363  | 5000                               | 0.5                            | 296  | 470  | 1.2             | 0.2                           | 10              | 264                           |
| 3Z390 | 351                     | 390  | 429  | 10000                              | 0.5                            | 350  | 555  | 1.2             | 0.2                           | 10              | 312                           |

