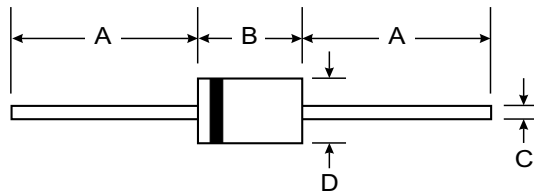


### Features

- Planar Die Construction
- 500mW Power Dissipation on FR-4 PCB
- General Purpose, Medium Current



### Mechanical Data

- Case: DO-35, Glass
- Leads: Solderable per MIL-STD-202, Method 208
- Marking: Type Number
- Polarity: Cathode Band
- Weight: 0.35 grams (approx.)

| DO-35                |       |      |
|----------------------|-------|------|
| Dim                  | Min   | Max  |
| A                    | 25.40 | —    |
| B                    | —     | 4.00 |
| C                    | —     | 0.60 |
| D                    | —     | 2.00 |
| All Dimensions in mm |       |      |

### Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

| Characteristic                                       | Symbol          | Value       | Unit             |
|------------------------------------------------------|-----------------|-------------|------------------|
| Zener Current (See Table on page 2)                  | —               | —           | —                |
| Forward Voltage @ $I_F = 200\text{mA}$               | $V_F$           | 1.5         | V                |
| Power Dissipation (Note 1)                           | $P_d$           | 500         | mW               |
| Thermal Resistance, Junction to Ambient Air (Note 1) | $R_{\theta JA}$ | 300         | K/W              |
| Operating and Storage Temperature Range              | $T_j, T_{STG}$  | -65 to +175 | $^\circ\text{C}$ |

- Notes:
1. Valid provided that leads are kept at ambient temperature.
  2. Tested with pulses,  $t \leq 1.0\text{ms}$ .

**Electrical Characteristics** @  $T_A = 25^\circ\text{C}$  unless otherwise specified

| Type Number | Zener Voltage Range (Note 2) |         | Test Current | Maximum Zener Impedance | Maximum Reverse Leakage Current |         |
|-------------|------------------------------|---------|--------------|-------------------------|---------------------------------|---------|
|             | $V_Z @ I_{ZT}$               |         | $I_{ZT}$     | $Z_{ZT} @ I_{ZT}$       | $I_R$                           | @ $V_R$ |
|             | Min (V)                      | Max (V) | mA           | $\Omega$                | $\mu\text{A}$                   | V       |
| TZX2V4      | 2.3                          | 2.6     | 5.0          | 100                     | 5.0                             | 0.5     |
| TZX2V4A     | 2.3                          | 2.5     | 5.0          | 100                     | 5.0                             | 0.5     |
| TZX2V4B     | 2.4                          | 2.6     | 5.0          | 100                     | 5.0                             | 0.5     |
| TZX2V7      | 2.5                          | 2.9     | 5.0          | 100                     | 5.0                             | 0.5     |
| TZX2V7A     | 2.5                          | 2.7     | 5.0          | 100                     | 5.0                             | 0.5     |
| TZX2V7B     | 2.6                          | 2.8     | 5.0          | 100                     | 5.0                             | 0.5     |
| TZX2V7C     | 2.7                          | 2.9     | 5.0          | 100                     | 5.0                             | 0.5     |
| TZX3V0      | 2.8                          | 3.2     | 5.0          | 100                     | 5.0                             | 0.5     |
| TZX3V0A     | 2.8                          | 3.0     | 5.0          | 100                     | 5.0                             | 0.5     |
| TZX3V0B     | 2.9                          | 3.1     | 5.0          | 100                     | 5.0                             | 0.5     |
| TZX3V0C     | 3.0                          | 3.2     | 5.0          | 100                     | 5.0                             | 0.5     |
| TZX3V3      | 3.1                          | 3.5     | 5.0          | 100                     | 5.0                             | 1.0     |
| TZX3V3A     | 3.1                          | 3.3     | 5.0          | 100                     | 5.0                             | 1.0     |
| TZX3V3B     | 3.2                          | 3.4     | 5.0          | 100                     | 5.0                             | 1.0     |
| TZX3V3C     | 3.3                          | 3.5     | 5.0          | 100                     | 5.0                             | 1.0     |
| TZX3V6      | 3.4                          | 3.8     | 5.0          | 100                     | 5.0                             | 1.0     |
| TZX3V6A     | 3.4                          | 3.6     | 5.0          | 100                     | 5.0                             | 1.0     |
| TZX3V6B     | 3.5                          | 3.7     | 5.0          | 100                     | 5.0                             | 1.0     |
| TZX3V6C     | 3.6                          | 3.8     | 5.0          | 100                     | 5.0                             | 1.0     |
| TZX3V9      | 3.7                          | 4.1     | 5.0          | 100                     | 5.0                             | 1.0     |
| TZX3V9A     | 3.7                          | 3.9     | 5.0          | 100                     | 5.0                             | 1.0     |
| TZX3V9B     | 3.8                          | 4.0     | 5.0          | 100                     | 5.0                             | 1.0     |
| TZX3V9C     | 3.9                          | 4.1     | 5.0          | 100                     | 5.0                             | 1.0     |
| TZX4V3      | 4.0                          | 4.5     | 5.0          | 100                     | 5.0                             | 1.5     |
| TZX4V3A     | 4.0                          | 4.2     | 5.0          | 100                     | 5.0                             | 1.5     |
| TZX4V3B     | 4.1                          | 4.3     | 5.0          | 100                     | 5.0                             | 1.5     |
| TZX4V3C     | 4.2                          | 4.4     | 5.0          | 100                     | 5.0                             | 1.5     |
| TZX4V3D     | 4.3                          | 4.5     | 5.0          | 100                     | 5.0                             | 1.5     |
| TZX4V7      | 4.4                          | 4.9     | 5.0          | 100                     | 5.0                             | 2.0     |
| TZX4V7A     | 4.4                          | 4.6     | 5.0          | 100                     | 5.0                             | 2.0     |
| TZX4V7B     | 4.5                          | 4.7     | 5.0          | 100                     | 5.0                             | 2.0     |
| TZX4V7C     | 4.6                          | 4.8     | 5.0          | 100                     | 5.0                             | 2.0     |
| TZX4V7D     | 4.7                          | 4.9     | 5.0          | 100                     | 5.0                             | 2.0     |
| TZX5V1      | 4.8                          | 5.3     | 5.0          | 100                     | 5.0                             | 2.0     |
| TZX5V1A     | 4.8                          | 5.0     | 5.0          | 100                     | 5.0                             | 2.0     |
| TZX5V1B     | 4.9                          | 5.1     | 5.0          | 100                     | 5.0                             | 2.0     |
| TZX5V1C     | 5.0                          | 5.2     | 5.0          | 100                     | 5.0                             | 2.0     |
| TZX5V1D     | 5.1                          | 5.3     | 5.0          | 100                     | 5.0                             | 2.0     |
| TZX5V6      | 5.2                          | 5.9     | 5.0          | 40                      | 5.0                             | 2.0     |
| TZX5V6A     | 5.2                          | 5.5     | 5.0          | 40                      | 5.0                             | 2.0     |
| TZX5V6B     | 5.3                          | 5.6     | 5.0          | 40                      | 5.0                             | 2.0     |
| TZX5V6C     | 5.4                          | 5.7     | 5.0          | 40                      | 5.0                             | 2.0     |
| TZX5V6D     | 5.5                          | 5.8     | 5.0          | 40                      | 5.0                             | 2.0     |
| TZX5V6E     | 5.6                          | 5.9     | 5.0          | 40                      | 5.0                             | 2.0     |

Notes: 1. Valid provided that device terminals are kept at ambient temperature.  
2. Tested with pulses,  $t \leq 1.0\text{ms}$ .

**Electrical Characteristics** @  $T_A = 25^\circ\text{C}$  unless otherwise specified

| Type<br>Number | Zener Voltage Range (Note 2)     |         | Test Current    | Maximum Zener<br>Impedance        | Maximum Reverse<br>Leakage Current |                  |
|----------------|----------------------------------|---------|-----------------|-----------------------------------|------------------------------------|------------------|
|                | V <sub>Z</sub> @ I <sub>ZT</sub> |         | I <sub>ZT</sub> | Z <sub>ZT</sub> @ I <sub>ZT</sub> | I <sub>R</sub>                     | @ V <sub>R</sub> |
|                | Min (V)                          | Max (V) | mA              | Ω                                 | μA                                 | V                |
| TZX6V2         | 5.7                              | 6.6     | 5.0             | 15                                | 1.0                                | 3.0              |
| TZX6V2A        | 5.7                              | 6.0     | 5.0             | 15                                | 1.0                                | 3.0              |
| TZX6V2B        | 5.9                              | 6.1     | 5.0             | 15                                | 1.0                                | 3.0              |
| TZX6V2C        | 6.0                              | 6.3     | 5.0             | 15                                | 1.0                                | 3.0              |
| TZX6V2D        | 6.1                              | 6.4     | 5.0             | 15                                | 1.0                                | 3.0              |
| TZX6V2E        | 6.3                              | 6.6     | 5.0             | 15                                | 1.0                                | 3.0              |
| TZX6V8         | 6.4                              | 7.2     | 5.0             | 15                                | 1.0                                | 3.5              |
| TZX6V8A        | 6.4                              | 6.7     | 5.0             | 15                                | 1.0                                | 3.5              |
| TZX6V8B        | 6.6                              | 6.9     | 5.0             | 15                                | 1.0                                | 3.5              |
| TZX6V8C        | 6.7                              | 7.0     | 5.0             | 15                                | 1.0                                | 3.5              |
| TZX6V8D        | 6.9                              | 7.2     | 5.0             | 15                                | 1.0                                | 3.5              |
| TZX7V5         | 7.0                              | 7.9     | 5.0             | 15                                | 1.0                                | 5.0              |
| TZX7V5A        | 7.0                              | 7.3     | 5.0             | 15                                | 1.0                                | 5.0              |
| TZX7V5B        | 7.2                              | 7.6     | 5.0             | 15                                | 1.0                                | 5.0              |
| TZX7V5C        | 7.3                              | 7.7     | 5.0             | 15                                | 1.0                                | 5.0              |
| TZX7V5D        | 7.5                              | 7.9     | 5.0             | 15                                | 1.0                                | 5.0              |
| TZX8V2         | 7.7                              | 8.7     | 5.0             | 20                                | 1.0                                | 6.2              |
| TZX8V2A        | 7.7                              | 8.1     | 5.0             | 20                                | 1.0                                | 6.2              |
| TZX8V2B        | 7.9                              | 8.3     | 5.0             | 20                                | 1.0                                | 6.2              |
| TZX8V2C        | 8.1                              | 8.5     | 5.0             | 20                                | 1.0                                | 6.2              |
| TZX8V2D        | 8.3                              | 8.7     | 5.0             | 20                                | 1.0                                | 6.2              |
| TZX9V1         | 8.5                              | 9.7     | 5.0             | 20                                | 1.0                                | 6.8              |
| TZX9V1A        | 8.5                              | 8.9     | 5.0             | 20                                | 1.0                                | 6.8              |
| TZX9V1B        | 8.7                              | 9.1     | 5.0             | 20                                | 1.0                                | 6.8              |
| TZX9V1C        | 8.9                              | 9.3     | 5.0             | 20                                | 1.0                                | 6.8              |
| TZX9V1D        | 9.1                              | 9.5     | 5.0             | 20                                | 1.0                                | 6.8              |
| TZX9V1E        | 9.3                              | 9.7     | 5.0             | 20                                | 1.0                                | 6.8              |
| TZX10          | 9.5                              | 10.6    | 5.0             | 25                                | 1.0                                | 7.5              |
| TZX10A         | 9.5                              | 9.9     | 5.0             | 25                                | 1.0                                | 7.5              |
| TZX10B         | 9.7                              | 10.1    | 5.0             | 25                                | 1.0                                | 7.5              |
| TZX10C         | 9.9                              | 10.3    | 5.0             | 25                                | 1.0                                | 7.5              |
| TZX10D         | 10.2                             | 10.6    | 5.0             | 25                                | 1.0                                | 7.5              |
| TZX11          | 10.4                             | 11.6    | 5.0             | 25                                | 1.0                                | 8.2              |
| TZX11A         | 10.4                             | 10.8    | 5.0             | 25                                | 1.0                                | 8.2              |
| TZX11B         | 10.7                             | 11.1    | 5.0             | 25                                | 1.0                                | 8.2              |
| TZX11C         | 10.9                             | 11.3    | 5.0             | 25                                | 1.0                                | 8.2              |
| TZX11D         | 11.1                             | 11.6    | 5.0             | 25                                | 1.0                                | 8.2              |
| TZX12          | 11.4                             | 12.7    | 5.0             | 35                                | 1.0                                | 9.5              |
| TZX12A         | 11.4                             | 11.9    | 5.0             | 35                                | 1.0                                | 9.5              |
| TZX12B         | 11.6                             | 12.1    | 5.0             | 35                                | 1.0                                | 9.5              |
| TZX12C         | 11.9                             | 12.4    | 5.0             | 35                                | 1.0                                | 9.5              |
| TZX12D         | 12.2                             | 12.7    | 5.0             | 35                                | 1.0                                | 9.5              |
| TZX13          | 12.4                             | 13.4    | 5.0             | 35                                | 1.0                                | 10               |
| TZX13A         | 12.4                             | 12.9    | 5.0             | 35                                | 1.0                                | 10               |
| TZX13B         | 12.6                             | 13.1    | 5.0             | 35                                | 1.0                                | 10               |
| TZX13C         | 12.9                             | 13.4    | 5.0             | 35                                | 1.0                                | 10               |

Notes: 1. Valid provided that device terminals are kept at ambient temperature.  
2. Tested with pulses,  $t \leq 1.0\text{ms}$ .

**Electrical Characteristics** @  $T_A = 25^\circ\text{C}$  unless otherwise specified

| Type<br>Number | Zener Voltage Range (Note 2)     |         | Test Current    | Maximum Zener<br>Impedance        | Maximum Reverse<br>Leakage Current |                  |
|----------------|----------------------------------|---------|-----------------|-----------------------------------|------------------------------------|------------------|
|                | V <sub>Z</sub> @ I <sub>ZT</sub> |         | I <sub>ZT</sub> | Z <sub>ZT</sub> @ I <sub>ZT</sub> | I <sub>R</sub>                     | @ V <sub>R</sub> |
|                | Min (V)                          | Max (V) | mA              | Ω                                 | μA                                 | V                |
| TZX14          | 13.2                             | 14.3    | 5.0             | 35                                | 1.0                                | 11               |
| TZX14A         | 13.2                             | 13.7    | 5.0             | 35                                | 1.0                                | 11               |
| TZX14B         | 13.5                             | 14.0    | 5.0             | 35                                | 1.0                                | 11               |
| TZX14C         | 13.8                             | 14.3    | 5.0             | 35                                | 1.0                                | 11               |
| TZX15          | 14.1                             | 15.5    | 5.0             | 40                                | 1.0                                | 11.5             |
| TZX15A         | 14.1                             | 14.7    | 5.0             | 40                                | 1.0                                | 11.5             |
| TZX15B         | 14.5                             | 15.1    | 5.0             | 40                                | 1.0                                | 11.5             |
| TZX15C         | 14.9                             | 15.5    | 5.0             | 40                                | 1.0                                | 11.5             |
| TZX16          | 15.3                             | 17.1    | 5.0             | 45                                | 1.0                                | 12               |
| TZX16A         | 15.3                             | 15.9    | 5.0             | 45                                | 1.0                                | 12               |
| TZX16B         | 15.7                             | 16.5    | 5.0             | 45                                | 1.0                                | 12               |
| TZX16C         | 16.3                             | 17.1    | 5.0             | 45                                | 1.0                                | 12               |
| TZX18          | 16.9                             | 19.0    | 5.0             | 55                                | 1.0                                | 13               |
| TZX18A         | 16.9                             | 17.7    | 5.0             | 55                                | 1.0                                | 13               |
| TZX18B         | 17.5                             | 18.3    | 5.0             | 55                                | 1.0                                | 13               |
| TZX18C         | 18.1                             | 19.0    | 5.0             | 55                                | 1.0                                | 13               |
| TZX20          | 18.8                             | 21.2    | 2.0             | 60                                | 1.0                                | 15               |
| TZX20A         | 18.8                             | 19.7    | 2.0             | 60                                | 1.0                                | 15               |
| TZX20B         | 19.5                             | 20.4    | 2.0             | 60                                | 1.0                                | 15               |
| TZX20C         | 20.2                             | 21.2    | 2.0             | 60                                | 1.0                                | 15               |
| TZX22          | 20.9                             | 23.3    | 2.0             | 65                                | 1.0                                | 17               |
| TZX22A         | 20.9                             | 21.9    | 2.0             | 65                                | 1.0                                | 17               |
| TZX22B         | 21.6                             | 22.6    | 2.0             | 65                                | 1.0                                | 17               |
| TZX22C         | 22.3                             | 23.3    | 2.0             | 65                                | 1.0                                | 17               |
| TZX24          | 22.9                             | 25.5    | 2.0             | 70                                | 1.0                                | 19               |
| TZX24A         | 22.9                             | 24.0    | 2.0             | 70                                | 1.0                                | 19               |
| TZX24B         | 23.6                             | 24.7    | 2.0             | 70                                | 1.0                                | 19               |
| TZX24C         | 24.3                             | 25.5    | 2.0             | 70                                | 1.0                                | 19               |
| TZX27          | 25.2                             | 28.6    | 2.0             | 80                                | 1.0                                | 21               |
| TZX27A         | 25.2                             | 26.6    | 2.0             | 80                                | 1.0                                | 21               |
| TZX27B         | 26.2                             | 27.6    | 2.0             | 80                                | 1.0                                | 21               |
| TZX27C         | 27.2                             | 28.6    | 2.0             | 80                                | 1.0                                | 21               |
| TZX30          | 28.2                             | 31.6    | 2.0             | 100                               | 1.0                                | 23               |
| TZX30A         | 28.2                             | 29.6    | 2.0             | 100                               | 1.0                                | 23               |
| TZX30B         | 29.2                             | 30.6    | 2.0             | 100                               | 1.0                                | 23               |
| TZX30C         | 30.2                             | 31.6    | 2.0             | 100                               | 1.0                                | 23               |
| TZX33          | 31.2                             | 34.5    | 2.0             | 120                               | 1.0                                | 25               |
| TZX33A         | 31.2                             | 32.6    | 2.0             | 120                               | 1.0                                | 25               |
| TZX33B         | 32.2                             | 33.6    | 2.0             | 120                               | 1.0                                | 25               |
| TZX33C         | 33.2                             | 34.5    | 2.0             | 120                               | 1.0                                | 25               |
| TZX36          | 34.2                             | 38.0    | 2.0             | 140                               | 1.0                                | 27               |
| TZX36A         | 34.2                             | 35.7    | 2.0             | 140                               | 1.0                                | 27               |
| TZX36B         | 35.3                             | 36.8    | 2.0             | 140                               | 1.0                                | 27               |
| TZX36C         | 26.4                             | 38.0    | 2.0             | 140                               | 1.0                                | 27               |

Notes: 1. Valid provided that device terminals are kept at ambient temperature.  
2. Tested with pulses,  $t \leq 1.0\text{ms}$ .