

■ Features:

- Very sharp reverse characteristic
- Low reverse current level
- Very high stability
- Low noise
- Available with tighter tolerances

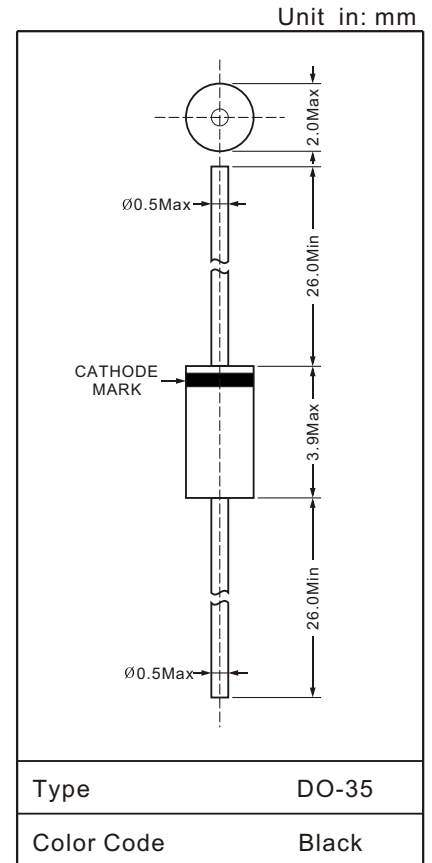
■ Applications

- Voltage stabilization

■ Absolute Maximum Rating

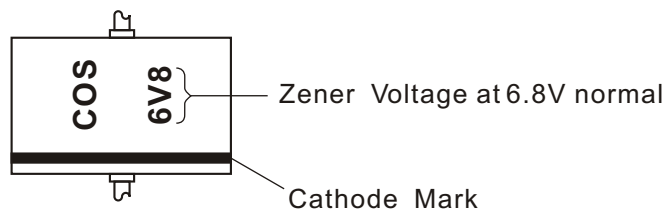
$T_j=25^{\circ}\text{C}$

| Parameter | Symbol | Value | Unit |
|---------------------------|------------------|---------|--------------------|
| Power dissipation | P | 500 | mW |
| Junction temperature | T_j | 175 | $^{\circ}\text{C}$ |
| Storage temperature range | T_{Stg} | -65~175 | $^{\circ}\text{C}$ |



■ Marking

- Example:



BZX2V0~39V

ELECTRICAL CHARACTERISTICS(Ta=25°C)

| Type | Zener Voltage at Iz=5mA Vz(v) | | Dynamic resistance | | Temp coeff of Zener volt at Iz=5mA AVz(%/°C) | Reverse Current at Ta=25°C IR(mA) | | Admissible Zener current Iz(mA) |
|--------|----------------------------------|-------|-------------------------------|-------------------------------|---|--------------------------------------|--------|------------------------------------|
| | | | at Iz=5mA f=1KHz Rzj() | at Iz=5mA f=1KHz Rzj() | | MAX. | VR(v)= | |
| | MAX. | MIN. | MAX. | MAX. | Typ | MAX. | | MAX. |
| BZX2V0 | 2.10 | 1.90 | 100 | 1000 | -0.075 | 120 | 0.7 | 165 |
| BZX2V2 | 2.31 | 2.09 | 100 | 1000 | -0.075 | 120 | 1.0 | 155 |
| BZX2V4 | 2.52 | 2.28 | 100 | 1000 | -0.070 | 120 | 1.0 | 145 |
| BZX2V7 | 2.83 | 2.57 | 110 | 1000 | -0.070 | 100 | 1.0 | 135 |
| BZX3V0 | 3.15 | 2.85 | 120 | 1000 | -0.070 | 50 | 1.0 | 130 |
| BZX3V3 | 3.46 | 3.14 | 120 | 1000 | -0.065 | 20 | 1.0 | 120 |
| BZX3V6 | 3.78 | 3.42 | 120 | 1100 | -0.055 | 10 | 1.0 | 110 |
| BZX3V9 | 4.09 | 3.71 | 120 | 1200 | -0.035 | 5 | 1.0 | 100 |
| BZX4V3 | 4.51 | 4.09 | 120 | 1200 | -0.030 | 5 | 1.0 | 90 |
| BZX4V7 | 4.93 | 4.47 | 100 | 1200 | -0.020 | 5 | 1.0 | 85 |
| BZX5V1 | 5.35 | 4.85 | 70 | 1200 | ±0.010 | 5 | 1.5 | 78 |
| BZX5V6 | 5.88 | 5.32 | 40 | 900 | 0.035 | 5 | 2.5 | 70 |
| BZX6V2 | 6.51 | 5.89 | 30 | 500 | 0.035 | 5 | 3.0 | 64 |
| BZX6V8 | 7.14 | 6.46 | 25 | 150 | 0.040 | 2 | 3.5 | 58 |
| BZX7V5 | 7.87 | 7.13 | 25 | 120 | 0.052 | 0.5 | 4.0 | 53 |
| BZX8V2 | 8.61 | 7.79 | 20 | 120 | 0.055 | 0.5 | 5.0 | 48 |
| BZX9V1 | 9.55 | 8.65 | 20 | 120 | 0.055 | 0.5 | 6.0 | 43 |
| BZX10 | 10.50 | 9.50 | 20 | 120 | 0.060 | 0.2 | 7.0 | 40 |
| BZX11 | 11.55 | 10.45 | 20 | 120 | 0.060 | 0.2 | 8.0 | 36 |
| BZX12 | 12.60 | 11.40 | 25 | 110 | 0.065 | 0.2 | 9.0 | 33 |
| BZX13 | 13.65 | 12.35 | 25 | 110 | 0.065 | 0.2 | 10.0 | 30 |
| BZX15 | 15.75 | 14.25 | 25 | 110 | 0.070 | 0.2 | 11.0 | 26 |
| BZX16 | 16.80 | 15.20 | 25 | 150 | 0.070 | 0.2 | 12.0 | 25 |
| BZX18 | 18.90 | 17.10 | 30 | 150 | 0.075 | 0.2 | 13.0 | 22 |
| BZX20 | 21.00 | 19.00 | 30 | 200 | 0.080 | 0.2 | 15.0 | 20 |
| BZX22 | 23.10 | 20.90 | 30 | 200 | 0.080 | 0.2 | 17.0 | 18 |
| BZX24 | 25.20 | 22.80 | 35 | 200 | 0.085 | 0.2 | 19.0 | 16 |
| BZX27 | 28.35 | 25.65 | 45 | 250 | 0.090 | 0.2 | 21.0 | 14 |
| BZX30 | 31.50 | 28.50 | 55 | 250 | 0.092 | 0.2 | 23.0 | 13 |
| BZX33 | 34.65 | 31.35 | 65 | 250 | 0.092 | 0.2 | 25.0 | 12 |
| BZX36 | 37.80 | 34.20 | 75 | 250 | 0.095 | 0.2 | 27.0 | 11 |
| BZX39 | 40.90 | 37.05 | 85 | 250 | 0.095 | 0.2 | 30.0 | 10 |

Note:

1. Zener Voltage is measured 40ms after electricity charging.
2. Data valid provided that leads are kept at ambient temperature at a distance of 8mm from case.

VF=1V MAX (at IF=100mA)

3. Special Voltage accuracy will be provided upon request at different pricing.

DAIWA

TEL:(852)23413351 FAX:(852)27978275
WEB SITE:<http://www.daiwahk.com>

COS Series

■ Main Characteristic

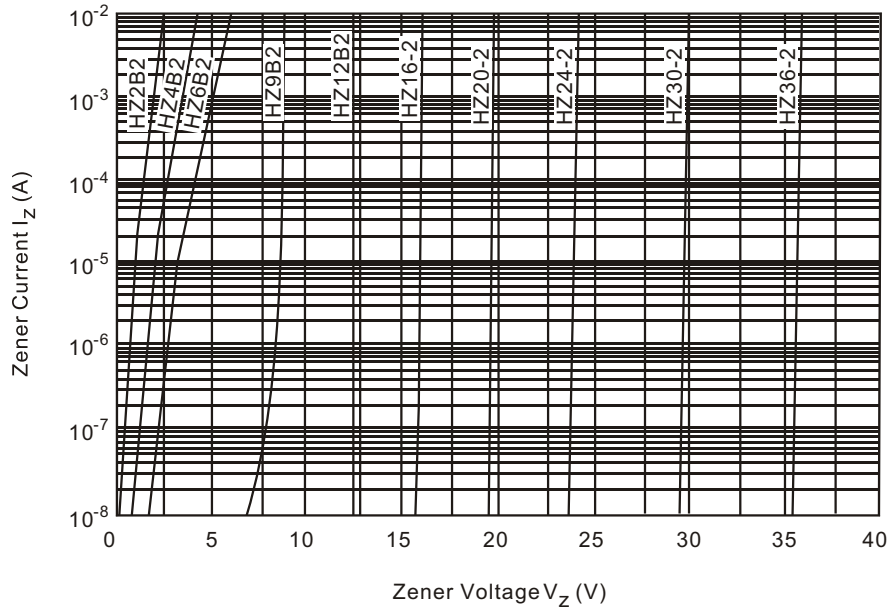


Fig.1 Zener current Vs. Zener voltage

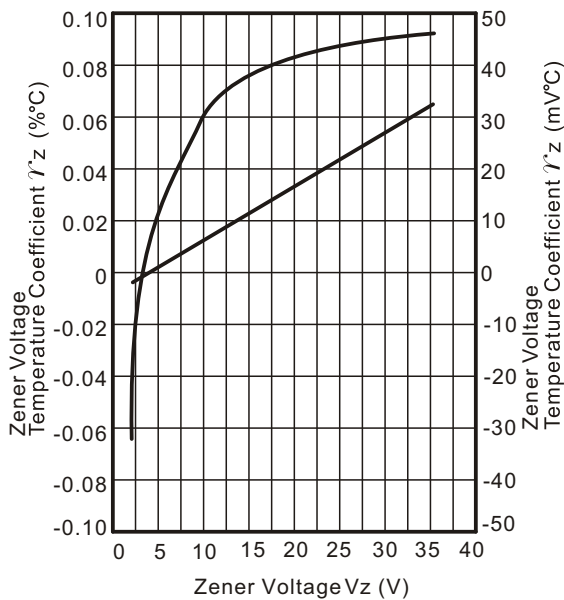


Fig.2 Temperature Coefficient Vs. Zener voltage

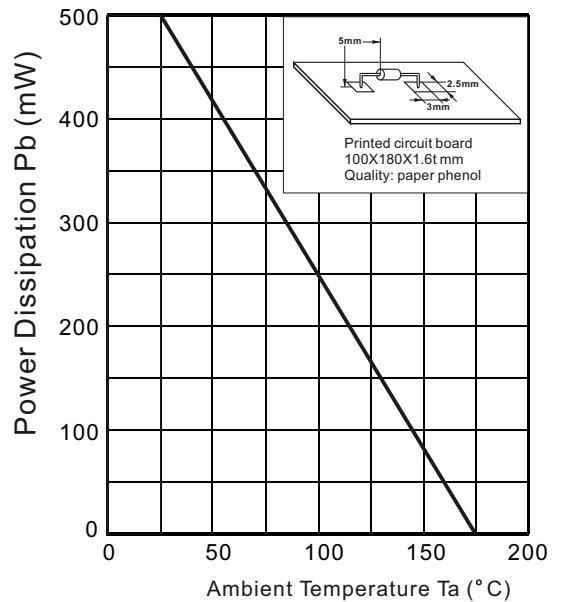


Fig.3 Power Dissipation Vs. Ambient Temperature

DAIWA

TEL:(852)23413351 FAX:(852)27978275
WEB SITE:<http://www.daiwahk.com>