

Zeners

1N4370A - 1N4372A 1N746A - 1N759A

Absolute Maximum Ratings * T_A = 25°C unless otherwise noted

| Symbol | Parameter | Value | Units |
|-----------------------------------|--|-------------|-------|
| P _D | Power Dissipation @ TL ≤ 75°C, Lead Length = 3/8" | 500 | mW |
| | Derate above 75°C | 4.0 | mW/°C |
| T _J , T _{STG} | Operating and Storage Temperature Range | -65 to +200 | °C |

* These ratings are limiting values above which the serviceability of the diode may be impaired.

Tolerance = 5%



Electrical Characteristics T_A = 25°C unless otherwise noted

| Device | V _Z (V) @ I _Z = 20mA (Note 1) | | | Z _Z (Ω) @ I _Z = 20mA | I _{ZM} (mA) (Note 2) | I _R (μA) @ V _R = 1V | |
|---------|---|------|------|--|----------------------------------|---|------------------------|
| | Min. | Typ. | Max. | | | T _a = 25°C | T _a = 125°C |
| 1N4370A | 2.28 | 2.4 | 2.52 | 30 | 150 | 100 | 200 |
| 1N4371A | 2.57 | 2.7 | 2.84 | 30 | 135 | 75 | 150 |
| 1N4372A | 2.85 | 3.0 | 3.15 | 29 | 120 | 50 | 100 |
| 1N746A | 3.14 | 3.3 | 3.47 | 28 | 110 | 10 | 30 |
| 1N747A | 3.42 | 3.6 | 3.78 | 24 | 100 | 10 | 30 |
| 1N748A | 3.71 | 3.9 | 4.10 | 23 | 95 | 10 | 30 |
| 1N749A | 4.09 | 4.3 | 4.52 | 22 | 85 | 2 | 30 |
| 1N750A | 4.47 | 4.7 | 4.94 | 19 | 75 | 2 | 30 |
| 1N751A | 4.85 | 5.1 | 5.36 | 17 | 70 | 1 | 20 |
| 1N752A | 5.32 | 5.6 | 5.88 | 11 | 65 | 1 | 20 |
| 1N753A | 5.89 | 6.2 | 6.51 | 7 | 60 | 0.1 | 20 |
| 1N754A | 6.46 | 6.8 | 7.14 | 5 | 55 | 0.1 | 20 |
| 1N755A | 7.13 | 7.5 | 7.88 | 6 | 50 | 0.1 | 20 |
| 1N756A | 7.79 | 8.2 | 8.61 | 8 | 45 | 0.1 | 20 |
| 1N757A | 8.65 | 9.1 | 9.56 | 10 | 40 | 0.1 | 20 |
| 1N758A | 9.50 | 10 | 10.5 | 17 | 35 | 0.1 | 20 |
| 1N759A | 11.40 | 12 | 12.6 | 30 | 30 | 0.1 | 20 |

V_F Forward Voltage = 1.5V Max @ I_F = 200mA

Notes:

- Zener Voltage (V_Z)
The zener voltage is measured with the device junction in the thermal equilibrium at the lead temperature (T_L) at 30°C ± 1°C and 3/8" lead length.
- Maximum Zener Current Ratings (I_{ZM})
The maximum current handling capability on a worst case basis is limited by the actual zener voltage at the operation point and the power derating curve.

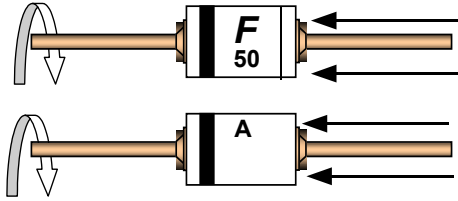
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Top Mark Information

| Device | Line 1 | Line 2 | Line 3 |
|---------|--------|--------|--------|
| 1N4370A | LOGO | 37 | 0A |
| 1N4371A | LOGO | 37 | 1A |
| 1N4372A | LOGO | 37 | 2A |
| 1N746A | LOGO | 46 | A |
| 1N747A | LOGO | 47 | A |
| 1N748A | LOGO | 48 | A |
| 1N749A | LOGO | 49 | A |
| 1N750A | LOGO | 50 | A |
| 1N751A | LOGO | 51 | A |
| 1N752A | LOGO | 52 | A |
| 1N753A | LOGO | 53 | A |
| 1N754A | LOGO | 54 | A |
| 1N755A | LOGO | 55 | A |
| 1N756A | LOGO | 56 | A |
| 1N757A | LOGO | 57 | A |
| 1N758A | LOGO | 58 | A |
| 1N759A | LOGO | 59 | A |

Top Mark Information (Continued)



1st line: F - Fairchild Logo

2nd line: Device Name - 4th to 5th characters of the device name.
or 5th to 6th characters for BZXyy series

3rd line: Device Name - 6th to 7th characters of the device name.
or Voltage rating for BZXyy series

General Requirements:

1.0 Cathode Band

2.0 First Line: F - Fairchild Logo

3.0 Second Line: Device name - For 1Nxx series: 4th to 5th characters of the device name.
For BZxx series: 5th to 6th characters of the device name.

4.0 Third Line: Device name - For 1Nxx series: 6th to 7th characters of the device name.
For BZXyy series: Voltage rating

5.0 Maximum no. of marking lines: 3

6.0 Maximum no. of digits per line: 2

7.0 FSC logo must be 20 % taller than the alphanumeric marking and should occupy the 2 characters of the specified line.




8.0 Marking Font: Arial (Except FSC Logo)

9.0 First character of each marking line must be aligned vertically.



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| CorePOWER™ | Green FPS™ | QS™ | TinyBuck™ |
| CROSSVOLT™ | Green FPS™ e-Series™ | Quiet Series™ | TinyLogic® |
| CTL™ | GTO™ | RapidConfigure™ | TINYOPTO™ |
| Current Transfer Logic™ | IntelliMAX™ |  ™ | TinyPower™ |
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