

## Zeners

### 1N4370A - 1N4372A 1N746A - 1N759A

#### Absolute Maximum Ratings \* T<sub>A</sub> = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
P <sub>D</sub>	Power Dissipation @ TL ≤ 75°C, Lead Length = 3/8"	500	mW
	Derate above 75°C	4.0	mW/°C
T <sub>J</sub> , T <sub>STG</sub>	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<sub>A</sub> = 25°C unless otherwise noted

Device	V <sub>Z</sub> (V) @ I <sub>Z</sub> = 20mA (Note 1)			Z <sub>Z</sub> (Ω) @ I <sub>Z</sub> = 20mA	I <sub>ZM</sub> (mA) (Note 2)	I <sub>R</sub> (μA) @ V <sub>R</sub> = 1V	
	Min.	Typ.	Max.			T <sub>a</sub> = 25°C	T <sub>a</sub> = 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<sub>F</sub> Forward Voltage = 1.5V Max @ I<sub>F</sub> = 200mA**

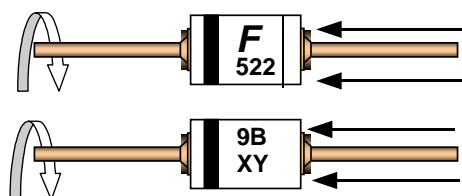
**Notes:**

- Zener Voltage (V<sub>Z</sub>)  
The zener voltage is measured with the device junction in the thermal equilibrium at the lead temperature (T<sub>L</sub>) at 30°C ± 1°C and 3/8" lead length.
- Maximum Zener Current Ratings (I<sub>ZM</sub>)  
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.

**Top Mark Information**

Device	Line 1	Line 2	Line 3	Line 5
1N4370A	LOGO	437	0A	XY
1N4371A	LOGO	437	1A	XY
1N4372A	LOGO	437	2A	XY
1N746A	LOGO	746	A	XY
1N747A	LOGO	747	A	XY
1N748A	LOGO	748	A	XY
1N749A	LOGO	749	A	XY
1N750A	LOGO	750	A	XY
1N751A	LOGO	751	A	XY
1N752A	LOGO	752	A	XY
1N753A	LOGO	753	A	XY
1N754A	LOGO	754	A	XY
1N755A	LOGO	755	A	XY
1N756A	LOGO	756	A	XY
1N757A	LOGO	757	A	XY
1N758A	LOGO	758	A	XY
1N759A	LOGO	759	A	XY

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**Top Mark Information** (Continued)

1<sup>st</sup> line: F - Fairchild Logo

2<sup>nd</sup> line: Device Name - 3<sup>rd</sup> to 5<sup>th</sup> characters of the device name.  
or 4<sup>th</sup> to 6<sup>th</sup> characters for BZXyy series

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

4<sup>th</sup> line: Device Code or - Two Digit - Six Weeks Date Code.  
Date code plus or Two Digit - Six Weeks Date Code  
Large die identification plus Large die identification, "L"

**General Requirements:**

1.0 Cathod Band

2.0 First Line: F - Fairchild Logo

3.0 Second Line: Device name - For 1Nxx series: 3<sup>rd</sup> to 5<sup>th</sup> characters of the device name.  
For BZxx series: 4<sup>th</sup> to 6<sup>th</sup> characters of the device name.

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

5.0 Fourth Line: XY or XYL - Two Digit - Six Weeks Date Code

Where: X represents the last digit of the calendar year

Y represents the Six weeks numeric code

L represents the Large die identification

6.0 Devices shall be marked as required in the device specification (PID or FSC Test Spec).

7.0 Maximum no. of marking lines: 4

8.0 Maximum no. of digits per line: 3

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

10.0 Marking Font: Arial (Except FSC Logo)

11.0 First character of each marking line must be aligned vertically

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CoolFET™	FPS™	MICROCOUPLER™	PowerSaver™	SuperSOT™-3
CROSSVOLT™	FRFET™	MicroFET™	PowerTrench®	SuperSOT™-6
DOME™	GlobalOptoisolator™	MicroPak™	QFET®	SuperSOT™-8
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Programmable Active Droop™	OPTOPLANAR™			

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