



## Zeners

### 1N4370A - 1N4372A

### 1N746A - 1N759A

#### Absolute Maximum Ratings \*

$T_A = 25^\circ\text{C}$  unless otherwise noted

Symbol	Parameter	Value	Units
$P_D$	Power Dissipation @ $T_L \leq 75^\circ\text{C}$ , Lead Length = 3/8"	500	mW
	Derate above $75^\circ\text{C}$	4.0	mW/ $^\circ\text{C}$
$T_J, T_{STG}$	Operating and Storage Temperature Range	-65 to +200	$^\circ\text{C}$

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

Tolerance = 5%



#### Electrical Characteristics $T_A=25^\circ\text{C}$ unless otherwise noted

Device	$V_Z$ (V) @ $I_Z = 20\text{mA}$ (Note 1)			$Z_Z$ ( $\Omega$ ) @ $I_Z = 20\text{mA}$	$I_{ZM}$ (mA) (Note 2)	$I_R$ ( $\mu\text{A}$ ) @ $V_R = 1\text{V}$	
	Min.	Typ.	Max.			$T_a = 25^\circ\text{C}$	$T_a = 125^\circ\text{C}$
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

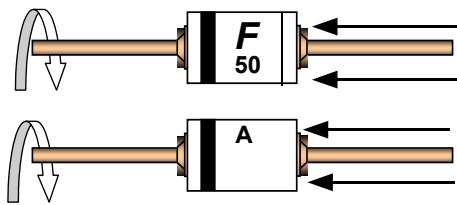
#### Notes:

1. Zener Voltage ( $V_Z$ )  
The zener voltage is measured with the device junction in the thermal equilibrium at the lead temperature ( $T_L$ ) at  $30^\circ\text{C} \pm 1^\circ\text{C}$  and 3/8" lead length.
2. 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.

**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)**



1<sup>st</sup> line: F - Fairchild Logo  
2<sup>nd</sup> line: Device Name - 4<sup>th</sup> to 5<sup>th</sup> characters of the device name.  
or 5<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

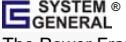
### **General Requirements:**

- 1.0 Cathode Band
- 2.0 First Line: F - Fairchild Logo
- 3.0 Second Line: Device name - For 1Nxx series: 4<sup>th</sup> to 5<sup>th</sup> characters of the device name.  
For BZxx series: 5<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 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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