

Rochester Electronics Manufactured Components

Rochester branded components are manufactured using either die/wafers purchased from the original suppliers or Rochester wafers recreated from the original IP. All recreations are done with the approval of the OCM.

Parts are tested using original factory test programs or Rochester developed test solutions to guarantee product meets or exceed the OCM data sheet.

Quality Overview

- ISO-9001
- AS9120 certification
- Qualified Manufacturers List (QML) MIL-PRF-35835
 - Class Q Military
 - Class V Space Level
- Qualified Suppliers List of Distributors (QSLD)
 - Rochester is a critical supplier to DLA and meets all industry and DLA standards.

Rochester Electronics, LLC is committed to supplying products that satisfy customer expectations for quality and are equal to those originally supplied by industry manufacturers.

The original manufacturer's datasheet accompanying this document reflects the performance and specifications of the Rochester manufactured version of this device. Rochester Electronics guarantees the performance of its semiconductor products to the original OEM specifications. 'Typical' values are for reference purposes only. Certain minimum or maximum ratings may be based on product characterization, design, simulation, or sample testing.

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.

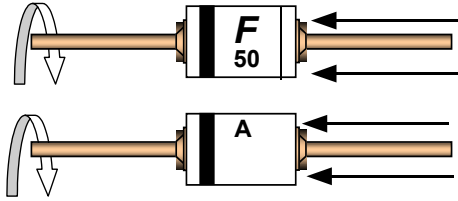
Zeners 1N4370A - 1N4372A 1N746A - 1N759A

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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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| CorePLUS™ | Global Power Resource SM | QFET® | TinyBoost™ |
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| | PowerXS™ | | |

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- A critical component in any component of a life support, device, or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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PRODUCT STATUS DEFINITIONS

Definition of Terms

Datasheet Identification	Product Status	Definition
Advance Information	Formative / In Design	Datasheet contains the design specifications for product development. Specifications may change in any manner without notice.
Preliminary	First Production	Datasheet contains preliminary data; supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice to improve design.
No Identification Needed	Full Production	Datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice to improve the design.
Obsolete	Not In Production	Datasheet contains specifications on a product that is discontinued by Fairchild Semiconductor. The datasheet is for reference information only.