



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

2EZ6.2  
THRU  
2EZ330

TECHNICAL SPECIFICATIONS OF GLASS PASSIVATED JUNCTION ZENER DIODES  
VOLTAGE RANGE - 6.2 to 330 Volts POWER - 2.0 Watts

FEATURES

- \* Voltage Range: 6.2V to 330V
- \* Low leakage
- \* Low inductance
- \* High peak reverse power dissipation
- \* Glass passivated junction
- \* Build-in strain relief

MECHANICAL DATA

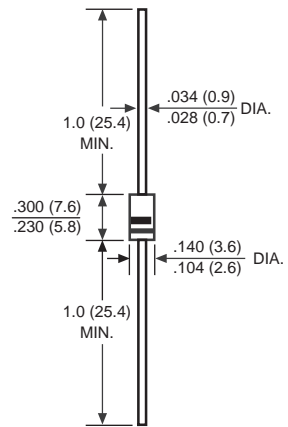
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: MIL-STD-202E, Method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.38 gram approx.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.  
Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.



DO-15



Dimensions in inches (millimeters)

	SYMBOL	VALUE	UNITS
Zener Current see Table "Characteristics"			
Power Dissipation (Notes 1) at Tamb=25°C	Ptot	2	W
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) (Notes 2)	IFSM	15	Amps
Maximum Forward Voltage at IF=200mA	VF	1.5	Volts
Operating and Storage Temperature	TJ, Tstg	-55 to + 150	°C

Notes: 1. Mounted on 5.0mm<sup>2</sup> (.013mm thick) land areas.

2. Measured on 8.3ms, single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum.

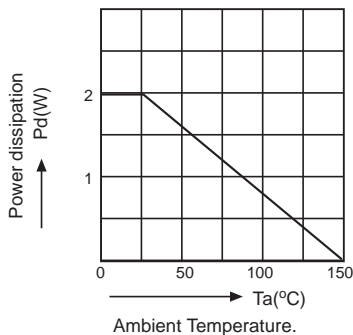


Fig. 1 - changes in the power dissipation due to the ambient temperature.

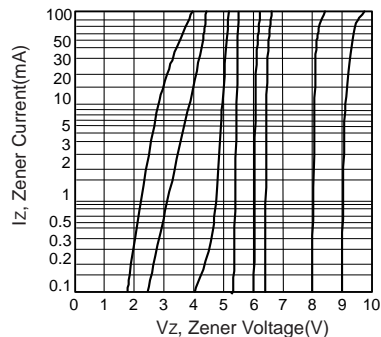


Fig. 2 - Vz=3.9 Thru 10 Volts

# RATING AND CHARACTERISTIC CURVES (2EZ6.2 THRU 2EZ330)

TYPE	Nominal Zener Voltage V <sub>Z</sub> @I <sub>ZT</sub>	Zener Test Current I <sub>ZT</sub> mA	Maximum Zener Impedance		I <sub>ZK</sub> mA	Maximum Reverse Leakage Current		Maximum Regulator Current I <sub>ZM</sub> mA
			Z <sub>ZT</sub> @I <sub>ZT</sub> Ohms	Z <sub>ZK</sub> @I <sub>ZK</sub> Ohms		I <sub>R</sub> uA	@V <sub>R</sub> Volts	
2EZ6.2	6.2	80.5	1.5	700	1.00	50.0	3.0	292.0
2EZ6.8	6.8	73.5	2.0	700	1.00	50.0	4.0	266.0
2EZ7.5	7.5	66.5	2.0	700	0.50	50.0	5.0	242.0
2EZ8.2	8.2	61.0	2.3	700	0.50	50.0	6.0	220.0
2EZ9.1	9.1	55.0	2.5	700	0.50	50.0	7.0	200.0
2EZ10	10.0	50.0	3.5	700	0.25	50.0	7.6	182.0
2EZ11	11	45.5	4.0	700	0.25	50.0	8.4	166.0
2EZ12	12	41.5	4.5	700	0.25	1.0	9.1	152.0
2EZ13	13	38.5	5.0	700	0.25	0.5	9.9	138.0
2EZ15	15	33.4	7.0	700	0.25	0.5	11.4	122.0
2EZ16	16	31.2	8.0	700	0.25	0.5	12.2	114.0
2EZ18	18	27.8	10	750	0.25	0.5	13.7	100.0
2EZ20	20	25.0	11	750	0.25	0.5	15.2	90.0
2EZ22	22	22.8	12	750	0.25	0.5	16.7	82.0
2EZ24	24	20.8	13	750	0.25	0.5	18.2	76.0
2EZ27	27	18.5	18	750	0.25	0.5	20.6	68.0
2EZ30	30	16.6	20	1000	0.25	0.5	22.5	60.0
2EZ33	33	15.1	23	1000	0.25	0.5	25.1	55.0
2EZ36	36	13.9	25	1000	0.25	0.5	27.4	50.0
2EZ39	39	12.8	30	1000	0.25	0.5	29.7	47.0
2EZ43	43	11.6	35	1500	0.25	0.5	32.7	43.0
2EZ47	47	10.6	40	1500	0.25	0.5	35.8	39.0
2EZ51	51	9.8	48	1500	0.25	0.5	38.8	36.0
2EZ56	56	9.0	55	2000	0.25	0.5	42.6	32.0
2EZ62	62	8.1	60	2000	0.25	0.5	47.1	29.0
2EZ68	68	7.4	75	2000	0.25	0.5	51.7	27.0
2EZ75	75	6.7	90	2000	0.25	0.5	56.0	24.0
2EZ82	82	6.1	100	3000	0.25	0.5	62.2	22.0
2EZ91	91	5.5	125	3000	0.25	0.5	69.2	20.0
2EZ100	100	5.0	175	3000	0.25	0.5	76.0	18.0
2EZ110	110	4.5	250	4000	0.25	0.5	83.6	17.0
2EZ120	120	4.2	325	4500	0.25	0.5	91.2	15.0
2EZ130	130	3.8	400	5000	0.25	0.5	98.8	14.0
2EZ140	140	3.6	500	5500	0.25	0.5	106.4	13.0
2EZ150	150	3.3	575	6000	0.25	0.5	114.0	12.0
2EZ160	160	3.1	650	6500	0.25	0.5	121.6	11.0
2EZ170	170	2.9	675	7000	0.25	0.5	130.4	11.0
2EZ180	180	2.8	725	7000	0.25	0.5	136.8	10.0
2EZ190	190	2.6	825	8000	0.25	0.5	144.8	10.0
2EZ200	200	2.5	1900	9990	0.25	0.5	152.0	9.0
2EZ220	220	2.0	2000	8500	0.25	0.5	167.0	8.0
2EZ270	270	1.6	2200	8500	0.25	0.5	205.0	6.7
2EZ300	300	1.5	2200	9000	0.25	0.5	228.0	5.9
2EZ330	330	1.4	2300	9000	0.25	0.5	250.0	5.4

NOTE: Standard Zener Voltage Tolerance  $\pm 5\%$

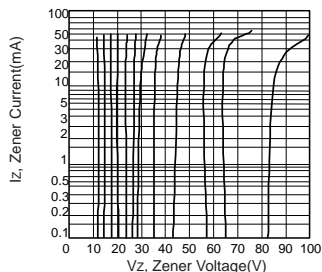


Fig. 3 - V<sub>Z</sub>=12 Thru 82 Volts

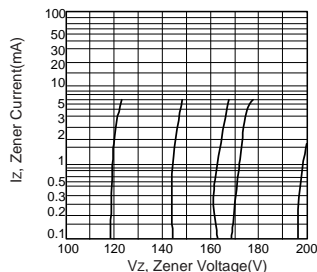


Fig. 4 - V<sub>Z</sub>=100 Thru 200 Volts

## Disclaimer

Any Customer or user of this document or products described herein in such applications shall assume all risks of such use and will agree to hold *DC COMPONENTS* harmless against all damages.

*DC COMPONENTS* disclaims any and all liability arising out of the application or use of any product, including consequential or incidental damages. Statement regarding the suitability of products for certain types of applications are based on *DC COMPONENTS*'s knowledge of typical requirements that are often placed on *DC COMPONENTS* products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application.

*DC COMPONENTS* reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to this document and any product described herein, and disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product. Parameters provided in datasheets and specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify *DC COMPONENTS*'s terms and conditions of purchase, including but not limited to the warranty expressed therein.

Unless otherwise in writing, *DC COMPONENTS* products are intended for use as general electronic components in standard applications ( eg: Consumer electronic, Computer equipment, Office equipment, etc.), and not recommended for use in a high specific application where a failure or malfunction of the device could result in human injury or death ( eg: Aerospace equipment, Submarine cables, Combustion equipment, Safety devices, Life support systems, etc.)

Customers using or selling *DC COMPONENTS* products not expressly indicated for use in such applications do so at their own risk. If customer intended to use *DC COMPONENTS* standard quality grade devices for applications not envisioned by *DC COMPONENTS*, please contact our sales representatives in advance.



*DC COMPONENTS CO., LTD.*