



# Frontier Electronics Corp.

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## 500m WATT ZENER DIODE

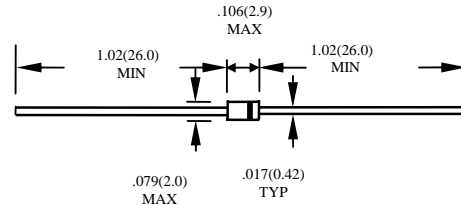
### GDZ2.0A THRU GDZ36D

#### FEATURES

- LOW COST
- SMALL SIZE
- GLASS SEALED

#### MECHANICAL DATA

- CASE: GLASS CASE, DO34, DIMENSIONS IN INCHES AND (MILLIMETERS)
- TERMINALS: AXIAL LEADS, SOLDERABLE PER MIL-STD -202, METHOD 208
- POLARITY: COLOR BAND DENOTES CATHODE
- MOUNTING POSITION: ANY
- WEIGHT: 0.013 GRAMS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED STORAGE AND OPERATING TEMPERATURE RANGE -55 TO + 150°C

ELECTRICAL CHARACTERISTICS (TA=25°C UNLESS OTHERWISE NOTED) VF=1.0V MAX, IF = 100mA FOR ALL TYPES								
JEDEC TYPE	NOMINAL ZENER VOLTS V <sub>Z</sub> @I <sub>ZT</sub> VOLTS		TEST CURRENT I <sub>ZT</sub> mA	TEST CURRENT I <sub>ZK</sub> mA	MAXIMUM ZENER IMPEDANCE		MAXIMUM REVERSE LEAKAGE CURRENT	
	MIN	MAX			Z <sub>ZT</sub> @ I <sub>ZT</sub>	Z <sub>ZK</sub> @ I <sub>ZK</sub>	I <sub>R</sub> μA	@ V <sub>R</sub> VOLTS
					OHMS	OHMS		
GDZ2.0A	1.88	2.10	20	1	140	2000	120	0.5
GDZ2.0B	2.02	2.20	20	1	140	2000	120	0.5
GDZ2.2A	2.12	2.30	20	1	120	2000	120	0.7
GDZ2.2B	2.22	2.41	20	1	120	2000	120	0.7
GDZ2.4A	2.33	2.52	20	1	100	2000	120	1.0
GDZ2.4B	2.43	2.63	20	1	100	2000	120	1.0
GDZ2.7A	2.54	2.75	20	1	100	1000	120	1.0
GDZ2.7B	2.69	2.91	20	1	100	1000	120	1.0
GDZ3.0A	2.85	3.07	20	1	80	1000	50	1.0
GDZ3.0B	3.01	3.22	20	1	80	1000	50	1.0
GDZ3.3A	3.16	3.38	20	1	70	1000	20	1.0
GDZ3.3B	3.32	3.53	20	1	70	1000	20	1.0
GDZ3.6A	3.46	3.69	20	1	60	1000	10	1.0
GDZ3.6B	3.60	3.84	20	1	60	1000	10	1.0
GDZ3.9A	3.74	4.01	20	1	50	1000	5	1.0
GDZ3.9B	3.89	4.16	20	1	50	1000	5	1.0
GDZ4.3A	4.04	4.29	20	1	40	1000	5	1.0
GDZ4.3B	4.17	4.43	20	1	40	1000	5	1.0
GDZ4.3C	4.30	4.57	20	1	40	1000	5	1.0
GDZ4.7A	4.44	4.68	20	1	25	900	5	1.0
GDZ4.7B	4.55	4.80	20	1	25	900	5	1.0
GDZ4.7C	4.68	4.93	20	1	25	900	5	1.0
GDZ5.1A	4.81	5.07	20	1	20	800	5	1.5
GDZ5.1B	4.94	5.20	20	1	20	800	5	1.5
GDZ5.1C	5.09	5.37	20	1	20	800	5	1.5

NOTE: \* MICRO MELF MOLDED GLASS

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JEDEC TYPE	NOMINAL ZENER VOLTS V <sub>Z</sub> @I <sub>ZT</sub>		TEST CURRENT I <sub>ZT</sub> mA	TEST CURRENT I <sub>ZK</sub> mA	MAXIMUM ZENER IMPEDANCE		MAXIMUM REVERSE LEAKAGE CURRENT	
	MIN	MAX			Z <sub>ZT</sub> @I <sub>ZT</sub>	Z <sub>ZK</sub> @I <sub>ZK</sub>	I <sub>R</sub>	@ V <sub>R</sub>
			OHMS	OHMS	μA	VOLTS		
GDZ5.6A	5.28	5.55	20	1	13	500	5	2.5
GDZ5.6B	5.45	5.73	20	1	13	500	5	2.5
GDZ5.6C	5.61	5.91	20	1	13	500	5	2.5
GDZ6.2A	5.78	6.09	20	1	10	300	5	3.0
GDZ6.2B	5.96	6.27	20	1	10	300	5	3.0
GDZ6.2C	6.12	6.44	20	1	10	300	5	3.0
GDZ6.8A	6.29	6.63	20	0.5	8	150	2	3.5
GDZ6.8B	6.49	6.83	20	0.5	8	150	2	3.5
GDZ6.8C	6.66	7.01	20	0.5	8	150	2	3.5
GDZ7.5A	6.85	7.22	20	0.5	8	120	0.5	4.0
GDZ7.5B	7.07	7.45	20	0.5	8	120	0.5	4.0
GDZ7.5C	7.29	7.67	20	0.5	8	120	0.5	4.0
GDZ8.2A	7.53	7.92	20	0.5	8	120	0.5	5.0
GDZ8.2B	7.78	8.19	20	0.5	8	120	0.5	5.0
GDZ8.2C	8.03	8.45	20	0.5	8	120	0.5	5.0
GDZ9.1A	8.29	8.73	20	0.5	8	120	0.5	6.0
GDZ9.1B	8.57	9.01	20	0.5	8	120	0.5	6.0
GDZ9.1C	8.83	9.30	20	0.5	8	120	0.5	6.0
GDZ10A	9.12	9.59	20	0.5	8	120	0.5	7.0
GDZ10B	9.41	9.90	20	0.5	8	120	0.5	7.0
GDZ10C	9.70	10.20	20	0.5	8	120	0.5	7.0
GDZ10D	9.94	10.44	20	0.5	8	120	0.5	7.0
GDZ11A	10.18	10.71	10	0.5	10	120	0.5	8.0
GDZ11B	10.50	11.05	10	0.5	10	120	0.5	8.0
GDZ11C	10.82	11.38	10	0.5	10	120	0.5	8.0
GDZ12A	11.13	11.71	10	0.5	12	110	0.2	9.0
GDZ12B	11.44	12.03	10	0.5	12	110	0.2	9.0
GDZ12C	11.74	12.35	10	0.5	12	110	0.2	9.0
GDZ13A	12.11	12.75	10	0.5	14	110	0.2	10.0
GDZ13B	12.55	13.21	10	0.5	14	110	0.2	10.0
GDZ13C	12.99	13.66	10	0.5	14	110	0.2	10.0
GDZ15A	13.44	14.13	10	0.5	16	110	0.2	11.0
GDZ15B	13.89	14.62	10	0.5	16	110	0.2	11.0
GDZ15C	14.35	15.09	10	0.5	16	110	0.2	11.0
GDZ16A	14.80	15.57	10	0.5	18	150	0.2	12.0
GDZ16B	15.25	16.04	10	0.5	18	150	0.2	12.0
GDZ16C	15.69	16.51	10	0.5	18	150	0.2	12.0
GDZ18A	16.22	17.06	10	0.5	23	150	0.2	13.0
GDZ18B	16.82	17.70	10	0.5	23	150	0.2	13.0
GDZ18C	17.42	18.33	10	0.5	23	150	0.2	13.0
GDZ20A	18.02	18.96	10	0.5	28	200	0.2	15.0
GDZ20B	18.63	19.59	10	0.5	28	200	0.2	15.0
GDZ20C	19.23	20.22	10	0.5	28	200	0.2	15.0
GDZ20D	19.72	20.72	10	0.5	28	200	0.2	15.0
GDZ22A	20.15	21.20	5	0.5	30	200	0.2	17.0
GDZ22B	20.64	21.71	5	0.5	30	200	0.2	17.0
GDZ22C	21.08	22.17	5	0.5	30	200	0.2	17.0
GDZ22D	21.52	22.63	5	0.5	30	200	0.2	17.0
GDZ24A	22.05	23.18	5	0.5	35	200	0.2	19.0
GDZ24B	22.61	23.77	5	0.5	35	200	0.2	19.0
GDZ24C	23.12	24.31	5	0.5	35	200	0.2	19.0
GDZ24D	23.63	24.85	5	0.5	35	200	0.2	19.0

NOTE : \* MICRO MELF MOLDED GLASS

ELECTRICAL CHARACTERISTICS (TA=25°C UNLESS OTHERWISE NOTED) VF=1.0V MAX, IF = 100mA FOR ALL TYPES								
JEDEC TYPE	NOMINAL ZENER VOLTS V <sub>Z</sub> @I <sub>ZT</sub> VOLTS		TEST CURRENT I <sub>ZT</sub> mA	TEST CURRENT I <sub>ZK</sub> mA	MAXIMUM ZENER IMPEDANCE		MAXIMUM REVERSE LEAKAGE CURRENT	
	MIN	MAX			Z <sub>ZT</sub> @ I <sub>ZT</sub>	Z <sub>ZK</sub> @I <sub>ZK</sub>	I <sub>R</sub>	@ V <sub>R</sub>
			OHMS	OHMS	μA	VOLTS		
GDZ27A	24.26	25.52	5	0.5	45	250	0.2	21.0
GDZ27B	24.97	26.26	5	0.5	45	250	0.2	21.0
GDZ27C	25.63	26.95	5	0.5	45	250	0.2	21.0
GDZ27D	26.29	27.64	5	0.5	45	250	0.2	21.0
GDZ30A	26.99	28.39	5	0.5	55	250	0.2	23.0
GDZ30B	27.70	29.13	5	0.5	55	250	0.2	23.0
GDZ30C	28.36	29.82	5	0.5	55	250	0.2	23.0
GDZ30D	29.02	30.51	5	0.5	55	250	0.2	23.0
GDZ33A	29.68	31.22	5	0.5	65	250	0.2	25.0
GDZ33B	30.32	31.88	5	0.5	65	250	0.2	25.0
GDZ33C	30.90	32.50	5	0.5	65	250	0.2	25.0
GDZ33D	31.49	33.11	5	0.5	65	250	0.2	25.0
GDZ36A	32.14	33.79	5	0.5	75	250	0.2	27.0
GDZ36B	32.79	34.49	5	0.5	75	250	0.2	27.0
GDZ36C	33.40	35.13	5	0.5	75	250	0.2	27.0
GDZ36D	34.01	35.77	5	0.5	75	250	0.2	27.0

# RATINGS AND CHARACTERISTIC CURVES GDZ2.0A THRU GDZ36D

FIG.1- BREAKDOWN CHARACTERISTICS

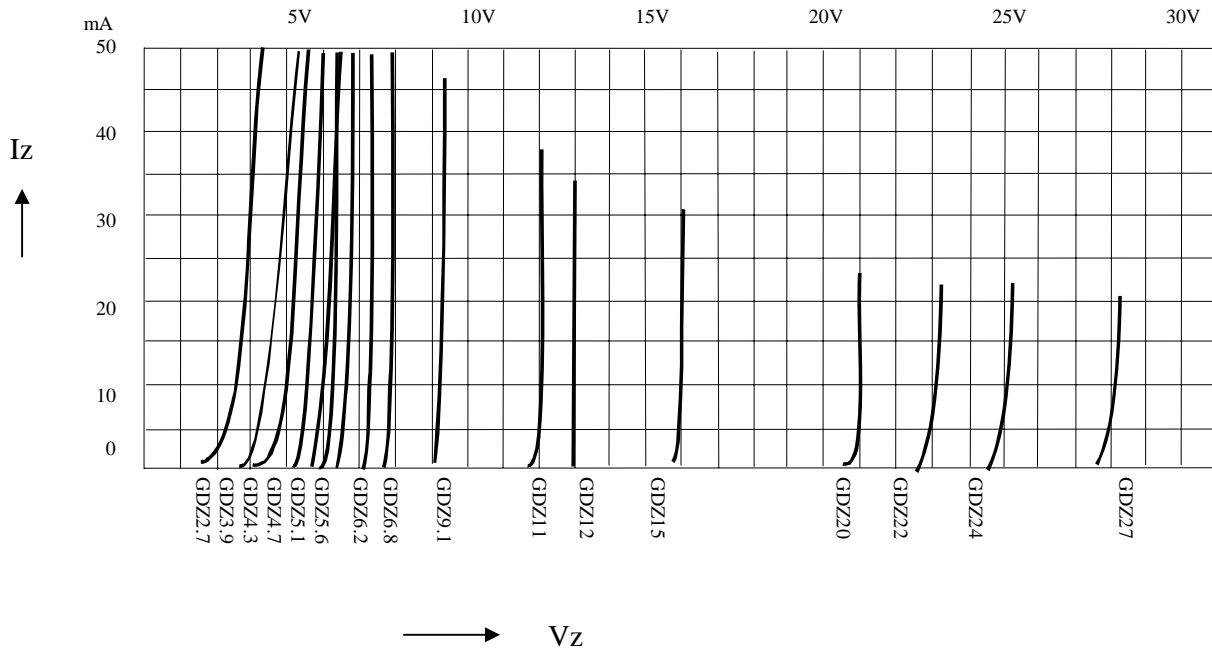


FIG.2- POWER ,TEMPERATURE DERATING CURVE

