Frontier Electronics Corp.

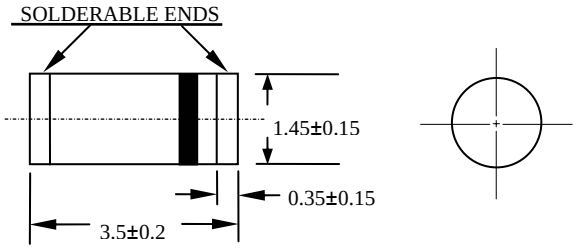
667 E. COCHRAN STREET, SIMI VALLEY, CA 93065
TEL: (805) 522-9998 FAX: (805) 522-9989
E-mail: frontiersales@frontierusa.com
Web: http://www.frontierusa.com

500mW MINI MELF ZENER DIODE

GLZ2.0A-LFR THRU GLZ36D-LFR

FEATURES

- LOW COST
- SMALL SIZE
- GLASS SEALED
- ROHS



MECHANICAL DATA

- CASE: MINI MELF GLASS CASE, DO-213AA(GL34)
  DIMENSIONS IN MILLIMETERS
- TERMINALS: SOLDERABLE PER MIL-STD -202, METHOD 208
- POLARITY: COLOR BAND DENOTES CATHODE
- MOUNTING POSITION: ANY
- WEIGHT: 0.036 GRAMS

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 BY 20%

ELECTRICAL CHARACTERISTICS (TA=25°C UNLESS OTHERWISE NOTED) VF=1.0V MAX, IF = 100mA FOR ALL TYPES

JEDEC TYPE	NOMINAL ZENER VOLTS V_Z@I_{ZT} VOLTS		TEST CURRENT I_{ZT} mA	TEST CURRENT I_{ZK} mA	MAXIMUM ZENER IMPEDANCE		MAXIMUM REVERSE LEAKAGE CURRENT	
	MIN	MAX			Z_{ZT} @ I_{ZT} OHMS	Z_{ZK}@I_{ZK} OHMS	I_R µA	@ V_R VOLTS
GLZ2.0A-LFR	1.880	2.100	20	1	140	2000	120	0.5
GLZ2.0B-LFR	2.020	2.200	20	1	140	2000	120	0.5
GLZ2.2A-LFR	2.120	2.300	20	1	120	2000	120	0.7
GLZ2.2B-LFR	2.220	2.410	20	1	120	2000	120	0.7
GLZ2.4A-LFR	2.330	2.520	20	1	100	2000	120	1.0
GLZ2.4B-LFR	2.430	2.630	20	1	100	2000	120	1.0
GLZ2.7A-LFR	2.540	2.750	20	1	100	1000	120	1.0
GLZ2.7B-LFR	2.690	2.910	20	1	100	1000	120	1.0
GLZ3.0A-LFR	2.850	3.070	20	1	80	1000	50	1.0
GLZ3.0B-LFR	3.010	3.220	20	1	80	1000	50	1.0
GLZ3.3A-LFR	3.160	3.380	20	1	70	1000	20	1.0
GLZ3.3B-LFR	3.320	3.530	20	1	70	1000	20	1.0
GLZ3.6A-LFR	3.455	3.695	20	1	60	1000	10	1.0
GLZ3.6B-LFR	3.600	3.845	20	1	60	1000	10	1.0
GLZ3.9A-LFR	3.740	4.010	20	1	50	1000	5	1.0
GLZ3.9B-LFR	3.890	4.160	20	1	50	1000	5	1.0
GLZ4.3A-LFR	4.040	4.290	20	1	40	1000	5	1.0
GLZ4.3B-LFR	4.170	4.430	20	1	40	1000	5	1.0
GLZ4.3C-LFR	4.300	4.570	20	1	40	1000	5	1.0
GLZ4.7A-LFR	4.440	4.680	20	1	25	900	5	1.0
GLZ4.7B-LFR	4.550	4.800	20	1	25	900	5	1.0
GLZ4.7C-LFR	4.680	4.930	20	1	25	900	5	1.0
GLZ5.1A-LFR	4.481	5.070	20	1	20	800	5	1.5
GLZ5.1B-LFR	4.940	5.200	20	1	20	800	5	1.5
GLZ5.1C-LFR	5.090	5.370	20	1	20	800	5	1.5

NOTE: * MINI MELF MOLDED GLASS

ELECTRICAL CHARACTERISTICS (TA=25℃UNLESS OTHERWISE NOTED) VF=1.0V MAX, IF = 100mA FOR ALL TYPES

JEDEC TYPE	NOMINAL ZENER VOLTS V_Z@I_{ZT} VOLTS		TEST CURRENT I_{ZT} mA	TEST CURRENT I_{ZK} mA	MAXIMUM ZENER IMPEDANCE		MAXIMUM REVERSE LEAKAGE CURRENT	
					Z_{ZT} @ I_{ZT}	Z_{ZK}@I_{ZK}	I_R	@ V_R
	MIN	MAX			OHMS	OHMS	μA	VOLTS
GLZ5.6A-LFR	5.280	5.550	20	1	13	500	5	2.5
GLZ5.6B-LFR	5.450	5.730	20	1	13	500	5	2.5
GLZ5.6C-LFR	5.610	5.910	20	1	13	500	5	2.5
GLZ6.2A-LFR	5.78	6.09	20	1	10	300	5	3.0
GLZ6.2B-LFR	5.96	6.27	20	1	10	300	5	3.0
GLZ6.2C-LFR	6.12	6.44	20	1	10	300	5	3.0
GLZ6.8A-LFR	6.29	6.63	20	0.5	8	150	2	3.5
GLZ6.8B-LFR	6.49	6.83	20	0.5	8	150	2	3.5
GLZ6.8C-LFR	6.66	7.01	20	0.5	8	150	2	3.5
GLZ7.5A-LFR	6.85	7.22	20	0.5	8	120	0.5	4.0
GLZ7.5B-LFR	7.07	7.45	20	0.5	8	120	0.5	4.0
GLZ7.5C-LFR	7.29	7.67	20	0.5	8	120	0.5	4.0
GLZ8.2A-LFR	7.53	7.92	20	0.5	8	120	0.5	5.0
GLZ8.2B-LFR	7.78	8.19	20	0.5	8	120	0.5	5.0
GLZ8.2C-LFR	8.03	8.45	20	0.5	8	120	0.5	5.0
GLZ9.1A-LFR	8.29	8.73	20	0.5	8	120	0.5	6.0
GLZ9.1B-LFR	8.57	9.01	20	0.5	8	120	0.5	6.0
GLZ9.1C-LFR	8.83	9.30	20	0.5	8	120	0.5	6.0
GLZ10A-LFR	9.12	9.59	20	0.5	8	120	0.2	7.0
GLZ10B-LFR	9.41	9.90	20	0.5	8	120	0.2	7.0
GLZ10C-LFR	9.70	10.20	20	0.5	8	120	0.2	7.0
GLZ10D-LFR	9.94	10.44	20	0.5	8	120	0.2	7.0
GLZ11A-LFR	10.18	10.71	10	0.5	10	120	0.2	8.0
GLZ11B-LFR	10.50	11.05	10	0.5	10	120	0.2	8.0
GLZ11C-LFR	10.82	11.38	10	0.5	10	120	0.2	8.0
GLZ12A-LFR	11.13	11.71	10	0.5	12	110	0.2	9.0
GLZ12B-LFR	11.44	12.03	10	0.5	12	110	0.2	9.0
GLZ12C-LFR	11.74	12.35	10	0.5	12	110	0.2	9.0
GLZ13A-LFR	12.11	12.75	10	0.5	14	110	0.2	10
GLZ13B-LFR	12.55	13.21	10	0.5	14	110	0.2	10
GLZ13C-LFR	12.99	13.66	10	0.5	14	110	0.2	10
GLZ15A-LFR	13.44	14.13	10	0.5	16	110	0.2	11
GLZ15B-LFR	13.89	14.62	10	0.5	16	110	0.2	11
GLZ15C-LFR	14.35	15.09	10	0.5	16	110	0.2	11
GLZ16A-LFR	14.80	15.57	10	0.5	18	150	0.2	12
GLZ16B-LFR	15.25	16.04	10	0.5	18	150	0.2	12
GLZ16C-LFR	15.69	16.51	10	0.5	18	150	0.2	12
GLZ18A-LFR	16.22	17.06	10	0.5	23	150	0.2	13
GLZ18B-LFR	16.82	17.70	10	0.5	23	150	0.2	13
GLZ18C-LFR	17.42	18.33	10	0.5	23	150	0.2	13
GLZ20A-LFR	18.02	18.96	10	0.5	28	200	0.2	15.0
GLZ20B-LFR	18.63	19.59	10	0.5	28	200	0.2	15.0
GLZ20C-LFR	19.23	20.22	10	0.5	28	200	0.2	15.0
GLZ20D-LFR	19.27	20.72	10	0.5	28	200	0.2	15.0
GLZ22A-LFR	20.15	21.20	5	0.5	30	200	0.2	17.0
GLZ22B-LFR	20.64	21.71	5	0.5	30	200	0.2	17.0
GLZ22C-LFR	21.08	22.17	5	0.5	30	200	0.2	17.0
GLZ22D-LFR	21.52	22.63	5	0.5	30	200	0.2	17.0

NOTE： * MINI MELF MOLDED GLASS .

ELECTRICAL CHARACTERISTICS (TA=25℃UNLESS OTHERWISE NOTED) VF=1.0V MAX, IF = 100mA FOR ALL TYPES								
JEDEC TYPE	NOMINAL ZENER VOLTS $V_Z@I_{ZT}$ VOLTS		TEST CURRENT I_{ZT} mA	TEST CURRENT I_{ZK} mA	MAXIMUM ZENER IMPEDANCE		MAXIMUM REVERSE LEAKAGE CURRENT	
	MIN	MAX			$Z_{ZT}@I_{ZT}$ OHMS	$Z_{ZK}@I_{ZK}$ OHMS	I_R μA	@ V_R VOLTS
GLZ24A-LFR	22.05	23.18	5	0.5	35	200	0.2	19.0
GLZ24B-LFR	22.61	23.77	5	0.5	35	200	0.2	19.0
GLZ24C-LFR	23.12	24.31	5	0.5	35	200	0.2	19.0
GLZ24D-LFR	23.63	24.85	5	0.5	35	200	0.2	19.0
GLZ27A-LFR	24.26	25.52	5	0.5	45	200	0.2	21.0
GLZ27B-LFR	24.97	26.26	5	0.5	45	200	0.2	21.0
GLZ27C-LFR	25.63	26.95	5	0.5	45	200	0.2	21.0
GLZ27D-LFR	26.29	27.64	5	0.5	45	200	0.2	21.0
GLZ30A-LFR	26.99	28.39	5	0.5	55	250	0.2	23.0
GLZ30B-LFR	27.70	29.13	5	0.5	55	250	0.2	23.0
GLZ30C-LFR	28.36	29.82	5	0.5	55	250	0.2	23.0
GLZ30D-LFR	29.02	30.51	5	0.5	55	250	0.2	23.0
GLZ33A-LFR	29.68	31.22	5	0.5	65	250	0.2	25.0
GLZ33B-LFR	30.32	31.88	5	0.5	65	250	0.2	25.0
GLZ33C-LFR	30.90	32.50	5	0.5	65	250	0.2	25.0
GLZ33D-LFR	31.49	33.11	5	0.5	65	250	0.2	25.0
GLZ36A-LFR	32.14	33.79	5	0.5	75	250	0.2	27.0
GLZ36B-LFR	32.79	34.49	5	0.5	75	250	0.2	27.0
GLZ36C-LFR	33.40	35.13	5	0.5	75	250	0.2	27.0
GLZ36D-LFR	34.01	35.77	5	0.5	75	250	0.2	27.0

NOTE： * MINI MELF MOLDED GLASS .

RATINGS AND CHARACTERISTIC CURVES GLZ2.0A-LFR THRU GLZ36D-LFR

FIG.1- BREAKDOWN CHARACTERISTICS

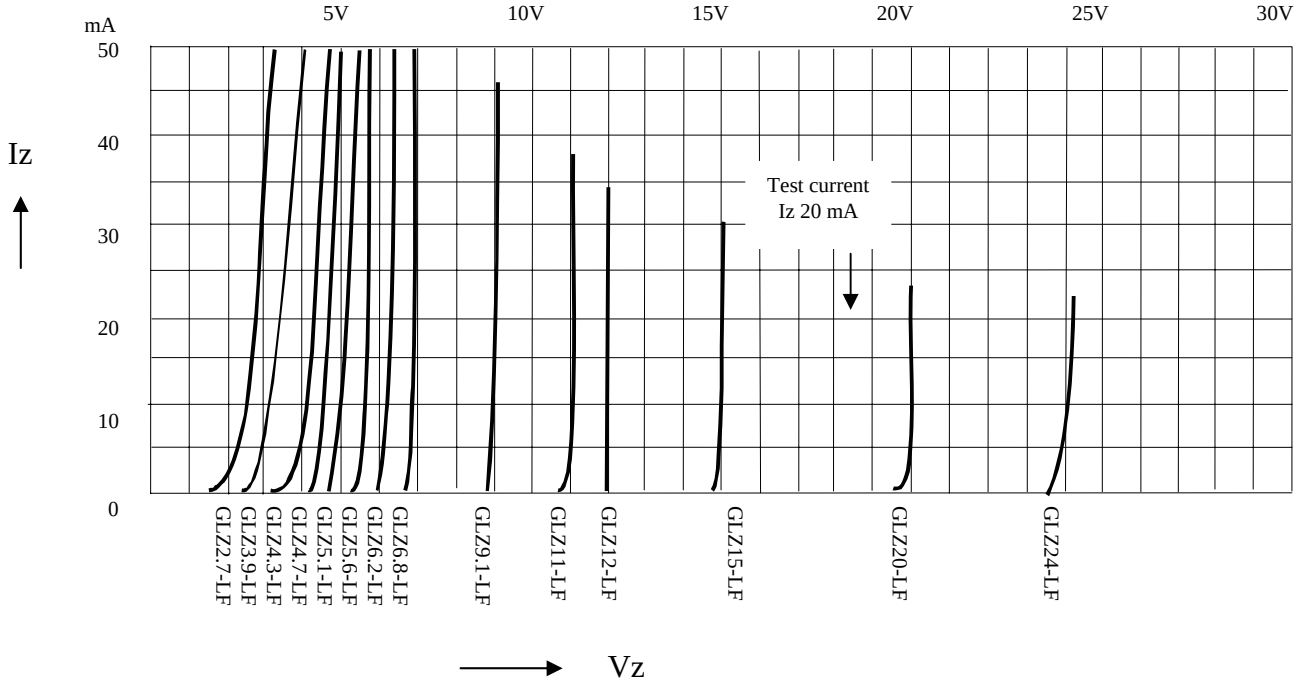


FIG.2- POWER ,TEMPERATURE DERATING CURVE

