

GMZ2.0~GMZ56

SURFACE MOUNT ZENER DIODES

VOLTAGE 2 to 56 Volt

POWER 500 mWatt

MICRO-MELF

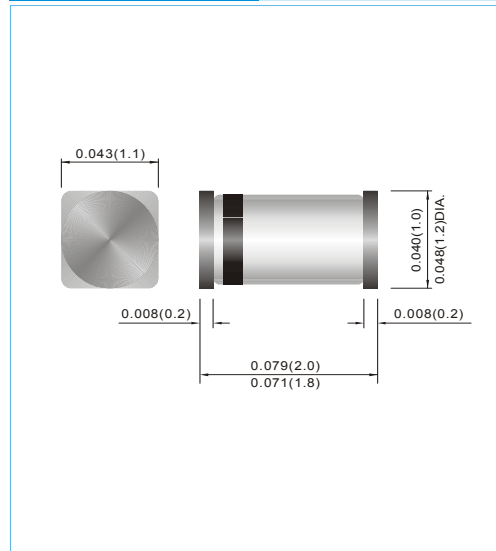
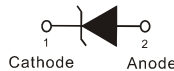
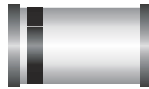
Unit : inch(mm)

FEATURES

- Planar Die construction
- 500mW Power Dissipation
- Ideally Suited for Automated Assembly Processes
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/EU directive)

MECHANICAL DATA

- Case: Molded Glass MICRO-MELF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.01 grams.
- Polarity : Color band denotes cathode end
- Packing information
T/R - 2.5K per 7" plastic Reel



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Power Dissipation at T _A = 25°C	P _{TOT}	500	mW
Operating Junction Temperature Range	T _J	175	°C
Storage Temperature Range	T _{STG}	-65 to + 175	°C

Valid provided that leads at a distance of 10mm from case are kept at ambient temperature.

Parameter	Symbol	Min.	Typ.	Max.	Units
Thermal Resistance Junction to Ambient Air	R _{θJA}	--	--	0.3	°C/mW
Forward Voltage at I _F = 100mA	V _F	--	--	1	V

Valid provided that leads at a distance of 10mm from case are kept at ambient temperature.

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Part Number	Nominal Zener Voltage		Max. Zener Impedance				Max. Reverse Leakage Current	
	$V_Z @ I_{ZT}$		$Z_{ZT} @ I_{ZT}$		$Z_{ZK} @ I_{ZK}$		$I_R @ V_R$	
	Min. V	Max. V	Ω	mA	Ω	mA	μA	V
GMZ 2.0A	1.88	2.1	140	20	2000	1	120	0.5
GMZ 2.0B	2.02	2.2	140	20	2000	1	120	0.5
GMZ 2.2A	2.12	2.3	120	20	2000	1	120	0.7
GMZ 2.2B	2.22	2.41	120	20	2000	1	120	0.7
GMZ 2.4A	2.33	2.52	100	20	2000	1	120	1
GMZ 2.4B	2.43	2.63	100	20	2000	1	120	1
GMZ 2.7A	2.54	2.75	100	20	1000	1	120	1
GMZ 2.7B	2.69	2.91	80	20	1000	1	120	1
GMZ 3.0A	2.85	3.07	80	20	1000	1	50	1
GMZ 3.0B	3.01	3.22	70	20	1000	1	50	1
GMZ 3.3A	3.16	3.38	70	20	1000	1	20	1
GMZ 3.3B	3.32	3.53	60	20	1000	1	20	1
GMZ 3.6A	3.46	3.69	60	20	1000	1	10	1
GMZ 3.6B	3.6	3.84	50	20	1000	1	10	1
GMZ 3.9A	3.74	4.01	50	20	1000	1	5	1
GMZ 3.9B	3.89	4.16	40	20	1000	1	5	1
GMZ 4.3A	4.04	4.29	40	20	1000	1	5	1
GMZ 4.3B	4.17	4.43	40	20	1000	1	5	1
GMZ 4.3C	4.3	4.57	25	20	1000	1	5	1
GMZ 4.7A	4.44	4.68	25	20	900	1	5	1
GMZ 4.7B	4.55	4.8	25	20	900	1	5	1
GMZ 4.7C	4.68	4.93	20	20	900	1	5	1
GMZ 5.1A	4.81	5.07	20	20	800	1	5	1.5
GMZ 5.1B	4.94	5.2	20	20	800	1	5	1.5
GMZ 5.1C	5.09	5.37	20	20	800	1	5	1.5
GMZ 5.6A	5.28	5.55	13	20	500	1	5	2.5
GMZ 5.6B	5.45	5.73	13	20	500	1	5	2.5
GMZ 5.6C	5.61	5.91	13	20	500	1	5	2.5
GMZ 6.2A	5.78	6.09	10	20	300	1	5	3
GMZ 6.2B	5.96	6.27	10	20	300	1	5	3
GMZ 6.2C	6.12	6.44	10	20	300	1	5	3
GMZ 6.8A	6.29	6.63	8	20	150	0.5	2	3.5
GMZ 6.8B	6.49	6.83	8	20	150	0.5	2	3.5
GMZ 6.8C	6.66	7.01	8	20	150	0.5	2	3.5
GMZ 7.5A	6.85	7.22	8	20	120	0.5	0.5	4
GMZ 7.5B	7.07	7.45	8	20	120	0.5	0.5	4
GMZ 7.5C	7.29	7.67	8	20	120	0.5	0.5	4
GMZ 8.2A	7.53	7.92	8	20	120	0.5	0.5	5
GMZ 8.2B	7.78	8.19	8	20	120	0.5	0.5	5
GMZ 8.2C	8.03	8.45	8	20	120	0.5	0.5	5
GMZ 9.1A	8.29	8.73	8	20	120	0.5	0.5	6
GMZ 9.1B	8.57	9.01	8	20	120	0.5	0.5	6
GMZ 9.1C	8.83	9.3	8	20	120	0.5	0.5	6
GMZ 10A	9.12	9.59	8	20	120	0.5	0.2	7
GMZ 10B	9.41	9.9	8	20	120	0.5	0.2	7
GMZ 10C	9.7	10.2	8	20	120	0.5	0.2	7
GMZ 10D	9.94	10.44	8	20	120	0.5	0.2	7
GMZ 11A	10.18	10.71	10	10	120	0.5	0.2	8
GMZ 11B	10.5	11.05	10	10	120	0.5	0.2	8
GMZ 11C	10.82	11.38	10	10	120	0.5	0.2	8

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Part Number	Nominal Zener Voltage		Max. Zener Impedance				Max. Reverse Leakage Current	
	$V_Z @ I_{ZT}$		$Z_{ZT} @ I_{ZT}$		$Z_{ZK} @ I_{ZK}$		$I_R @ V_R$	
	Min. V	Max. V	Ω	mA	Ω	mA	μA	V
GMZ 12A	11.13	11.71	12	10	110	0.5	0.2	9
GMZ 12B	11.44	12.03	12	10	110	0.5	0.2	9
GMZ 12C	11.74	12.35	12	10	110	0.5	0.2	9
GMZ 13A	12.11	12.75	14	10	110	0.5	0.2	10
GMZ 13B	12.55	13.21	14	10	110	0.5	0.2	10
GMZ 13C	12.99	13.66	14	10	110	0.5	0.2	10
GMZ 15A	13.44	14.13	16	10	110	0.5	0.2	11
GMZ 15B	13.89	14.62	16	10	110	0.5	0.2	11
GMZ 15C	14.35	15.09	16	10	110	0.5	0.2	11
GMZ 16A	14.8	15.57	18	10	150	0.5	0.2	12
GMZ 16B	15.25	16.04	18	10	150	0.5	0.2	12
GMZ 16C	15.69	16.51	18	10	150	0.5	0.2	12
GMZ 18A	16.22	17.06	23	10	150	0.5	0.2	13
GMZ 18B	16.82	17.7	23	10	150	0.5	0.2	13
GMZ 18C	17.42	18.33	23	10	150	0.5	0.2	13
GMZ 20A	18.02	18.96	28	10	200	0.5	0.2	15
GMZ 20B	18.63	19.59	28	10	200	0.5	0.2	15
GMZ 20C	19.23	20.22	28	10	200	0.5	0.2	15
GMZ 20D	19.72	20.72	28	10	200	0.5	0.2	15
GMZ 22A	20.15	21.2	30	5	200	0.5	0.2	17
GMZ 22B	20.64	21.71	30	5	200	0.5	0.2	17
GMZ 22C	21.08	22.17	30	5	200	0.5	0.2	17
GMZ 22D	21.52	22.63	30	5	200	0.5	0.2	17
GMZ 24A	22.05	23.18	35	5	200	0.5	0.2	19
GMZ 24B	22.61	23.77	35	5	200	0.5	0.2	19
GMZ 24C	23.12	24.31	35	5	200	0.5	0.2	19
GMZ 24D	23.63	24.85	35	5	200	0.5	0.2	19
GMZ 27A	24.26	25.52	45	5	250	0.5	0.2	21
GMZ 27B	24.97	26.26	45	5	250	0.5	0.2	21
GMZ 27C	25.63	26.95	45	5	250	0.5	0.2	21
GMZ 27D	26.29	27.64	45	5	250	0.5	0.2	21
GMZ 30A	26.99	28.39	55	5	250	0.5	0.2	23
GMZ 30B	27.7	29.13	55	5	250	0.5	0.2	23
GMZ 30C	28.36	29.82	55	5	250	0.5	0.2	23
GMZ 30D	29.02	30.51	55	5	250	0.5	0.2	23
GMZ 33A	29.68	31.22	65	5	250	0.5	0.2	25
GMZ 33B	30.32	31.88	65	5	250	0.5	0.2	25
GMZ 33C	30.9	32.5	65	5	250	0.5	0.2	25
GMZ 33D	31.49	33.11	65	5	250	0.5	0.2	25
GMZ 36A	32.14	33.79	75	5	250	0.5	0.2	27
GMZ 36B	32.79	34.49	75	5	250	0.5	0.2	27
GMZ 36C	33.4	35.13	75	5	250	0.5	0.2	27
GMZ 36D	34.01	35.77	75	5	250	0.5	0.2	27
GMZ 39A	34.68	36.47	85	5	250	0.5	0.2	30
GMZ 39B	35.36	37.19	85	5	250	0.5	0.2	30
GMZ 39C	36	37.85	85	5	250	0.5	0.2	30
GMZ 39D	36.63	38.52	85	5	250	0.5	0.2	30
GMZ 43	40	45	90	5	-	-	0.2	33
GMZ 47	44	49	90	5	-	-	0.2	36
GMZ 51	48	54	110	5	-	-	0.2	39
GMZ 56	53	60	110	5	-	-	0.2	43

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RATING AND CHARACTERISTIC CURVES

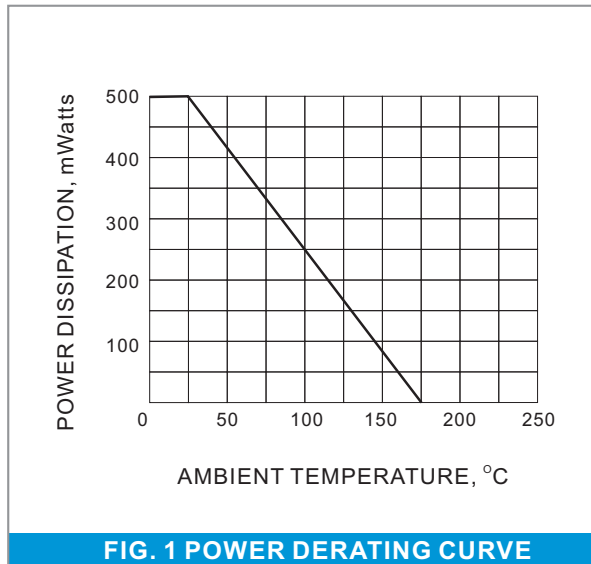


FIG. 1 POWER DERATING CURVE

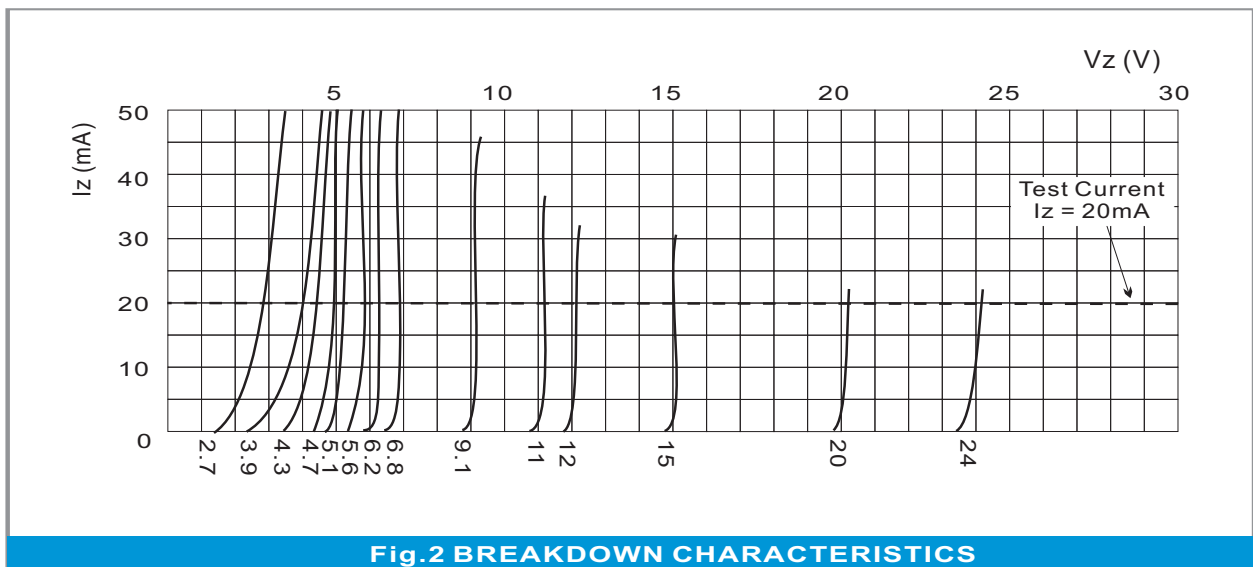
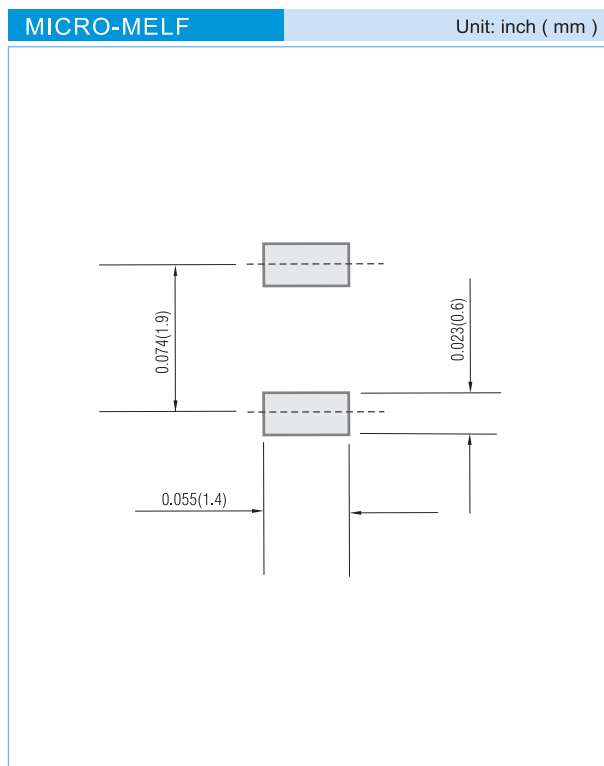


Fig.2 BREAKDOWN CHARACTERISTICS

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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
T/R - 10K per 13" plastic Reel
T/R - 2.5K per 7" plastic Reel

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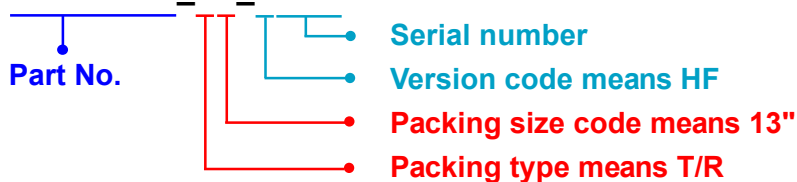
Part No_packing code_Version

GMZ2.0_R1_00001

GMZ2.0_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

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