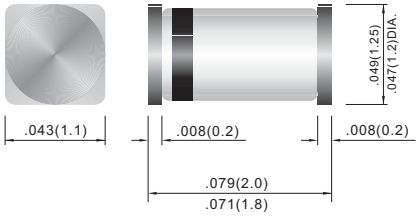
DATA SHEET

GMZ2.0~GMZ56

SURFACE MOUNT ZENER DIODES

VOLTAGE 2.0 to 56 Volts **POWER** 500 mWatts

MICRO-MELF Unit : inch (mm)



FEATURES

- Planar Die construction
- 500mW Power Dissipation
- Ideally Suited for Automated Assembly Processes

MECHANICAL DATA

- Case: Molded Glass MICRO-MEIF
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram Below
- Approx. Weight: 0.008 grams
- Mounting Position: Any
- Packing information

  T/R - 2.5K per 7" plastic Reel

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Power Dissipation at Tamb = 25 °C	P_{TOT}	500	mW
Junction Temperature	T_J	175	°C
Storage Temperature Range	T_S	-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	RthA	--	--	0.3	K/mW
Forward Voltage at IF = 100mA	VF	--	--	1	V
Valid provided that leads at a distance of 10mm from case are kept at ambient temperature.					

Part Number	CLASS	V_Z @ I_{ZT}		IZ (mA)	VR (V)	IR(uA) MAX	Izt (mA)	Z_{ZT}(Ω) MAX	I_{ZK} (mA)	Z_{ZK}(Ω) MAX
		Min. V	Max. V							
GMZ 2.0	A	1.88	2.10	20	0.5	120	20	140	1	2000
	B	2.02	2.20							
GMZ 2.2	A	2.12	2.30	20	0.7	120	20	120	1	2000
	B	2.22	2.41							
GMZ 2.4	A	2.33	2.52	20	1.0	120	20	100	1	2000
	B	2.43	2.63							
GMZ 2.7	A	2.54	2.75	20	1.0	120	20	100	1	1000
	B	2.69	2.91							
GMZ 3.0	A	2.85	3.07	20	1.0	50	20	80	1	1000
	B	3.01	3.22							
GMZ 3.3	A	3.16	3.38	20	1.0	20	20	70	1	1000
	B	3.32	3.53							
GMZ 3.6	A	3.455	3.695	20	1.0	10	20	60	1	1000
	B	3.60	3.845							
GMZ 3.9	A	3.74	4.01	20	1.0	5	20	50	1	1000
	B	3.89	4.16							
GMZ 4.3	A	4.04	4.29	20	1.0	5	20	40	1	1000
	B	4.17	4.43							
	C	4.30	4.57							
GMZ 4.7	A	4.44	4.68	20	1.0	5	20	25	1	900
	B	4.55	4.80							
	C	4.68	4.93							
GMZ 5.1	A	4.81	5.07	20	1.5	5	20	20	1	800
	B	4.94	5.20							
	C	5.09	5.37							
GMZ 5.6	A	5.28	5.55	20	2.5	5	20	13	1	500
	B	5.45	5.73							
	C	5.61	5.91							
GMZ 6.2	A	5.78	6.09	20	3.0	5	20	10	1	300
	B	5.96	6.27							
	C	6.12	6.44							
GMZ 6.8	A	6.29	6.63	20	3.5	2	20	8	0.5	150
	B	6.49	6.83							
	C	6.66	7.01							
GMZ 7.5	A	6.85	7.22	20	4.0	0.5	20	8	0.5	120
	B	7.07	7.45							
	C	7.29	7.67							
GMZ 8.2	A	7.53	7.92	20	5.0	0.5	20	8	0.5	120
	B	7.78	8.19							
	C	8.03	8.45							
GMZ 9.1	A	8.29	8.73	20	6.0	0.5	20	8	0.5	120
	B	8.57	9.01							
	C	8.83	9.30							
GMZ 10	A	9.12	9.59	20	7.0	0.2	20	8	0.5	120
	B	9.41	9.90							
	C	9.70	10.20							
	D	9.94	10.44							
GMZ 11	A	10.18	10.71	10	8.0	0.2	10	10	0.5	120
	B	10.50	11.05							
	C	10.82	11.38							

Part Number	CLASS	V_Z @ I_{ZT}		IZ (mA)	VR (V)	IR(uA) MAX	Izt (mA)	Z_{ZT}(Ω) MAX	I_{ZK} (mA)	Z_{ZK}(Ω) MAX
		Min. V	Max. V							
GMZ 12	A	11.13	11.71	10	9.0	0.2	10	12	0.5	110
	B	11.44	12.03							
	C	11.74	12.35							
GMZ 13	A	12.11	12.75	10	10	0.2	10	14	0.5	110
	B	12.55	13.21							
	C	12.99	13.66							
GMZ 15	A	13.44	14.13	10	11	0.2	10	16	0.5	110
	B	13.89	14.62							
	C	14.35	15.09							
GMZ 16	A	14.80	15.57	10	12	0.2	10	18	0.5	150
	B	15.25	16.04							
	C	15.69	16.51							
GMZ 18	A	16.22	17.06	10	13	0.2	10	23	0.5	150
	B	16.82	17.70							
	C	17.42	18.33							
GMZ 20	A	18.02	18.96	10	15	0.2	10	28	0.5	200
	B	18.63	19.59							
	C	19.23	20.22							
	D	19.72	20.72							
GMZ 22	A	20.15	21.20	5	17	0.2	5	30	0.5	200
	B	20.64	21.71							
	C	21.08	22.17							
	D	21.52	22.63							
GMZ 24	A	22.05	23.18	5	19	0.2	5	35	0.5	200
	B	22.61	23.77							
	C	23.12	24.31							
	D	23.63	24.85							
GMZ 27	A	24.26	25.52	5	21	0.2	5	45	0.5	250
	B	24.97	26.26							
	C	25.63	26.95							
	D	26.29	27.64							
GMZ 30	A	26.99	28.39	5	23	0.2	5	55	0.5	250
	B	27.70	29.13							
	C	28.36	29.82							
	D	29.02	30.51							
GMZ 33	A	29.68	31.22	5	25	0.2	5	65	0.5	250
	B	30.32	31.88							
	C	30.90	32.50							
	D	31.49	33.11							
GMZ 36	A	32.14	33.79	5	27	0.2	5	75	0.5	250
	B	32.79	34.49							
	C	33.40	35.13							
	D	34.01	35.77							
GMZ 39	A	34.68	36.47	5	30	0.2	5	85	0.5	250
	B	35.36	37.19							
	C	36.00	37.85							
	D	36.63	38.52							
GMZ 43		40.00	45.00	5	33	0.2	5	90	--	
GMZ 47		44.00	49.00	5	36	0.2	5	90	--	
GMZ 51		48.00	54.00	5	39	0.2	5	110	--	
GMZ 56		53.00	60.00	5	43	0.2	5	110	--	

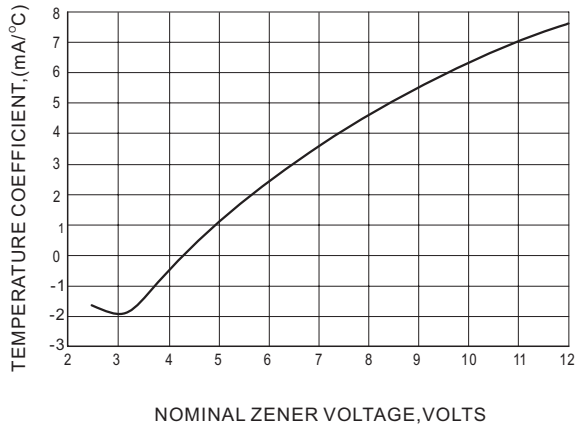


Fig.1 TEMPERATURE COEFFICENTS

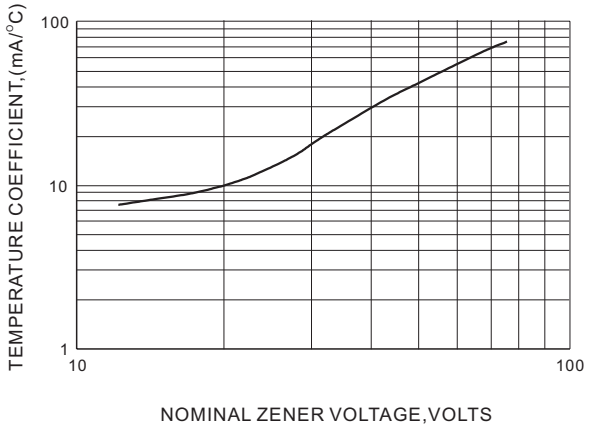


Fig.2 TEMPERATURE COEFFICENTS

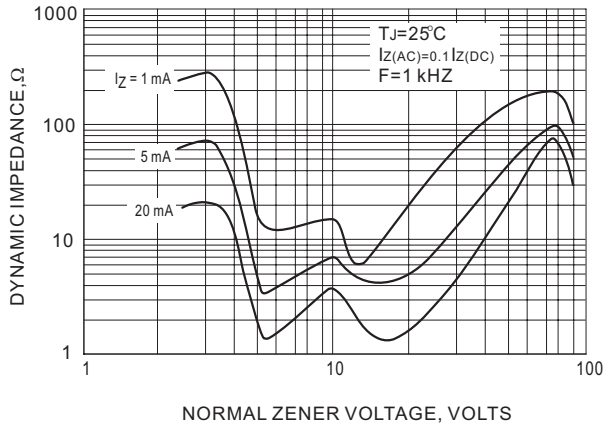


Fig.3 EFFECT OF ZENER VOLTAGE ON ZENER IMPEDANCE

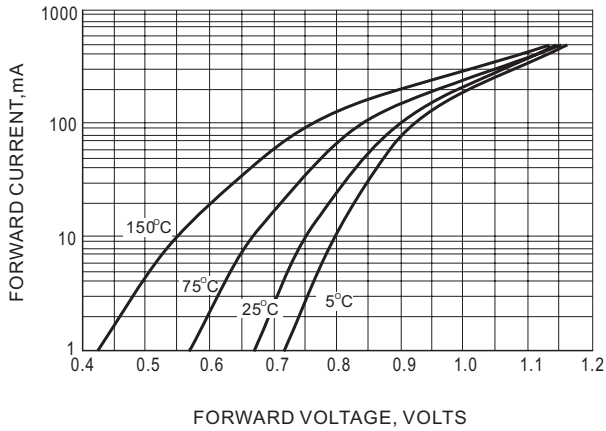


Fig.4 TYPICAL FORWARD VOLTAGE

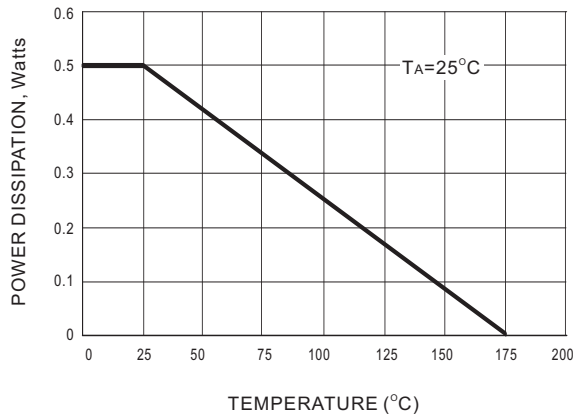


Fig.5 STEADY STATE POWER DERATING

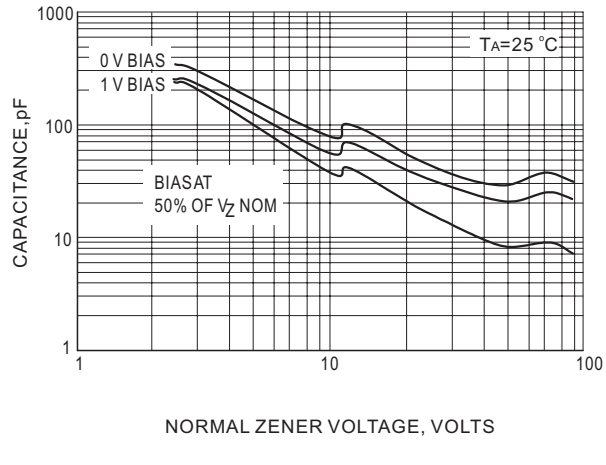


Fig.6 TYPICAL CAPACITANCE

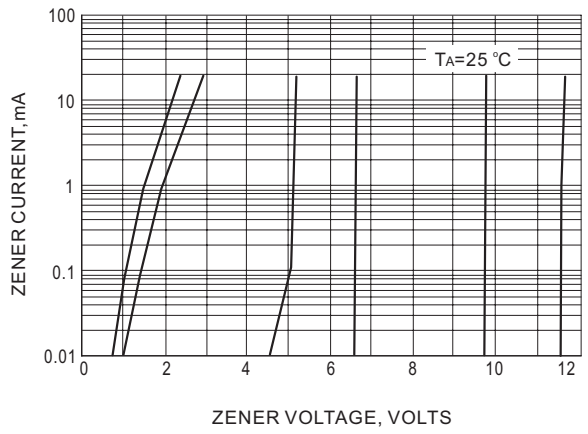


Fig.7 ZENER VOLTAGE VERSUS ZENER CURRENT

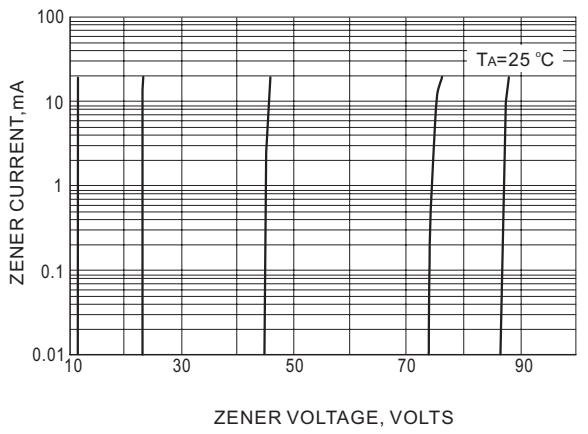


Fig.8 ZENER VOLTAGE VERSUS ZENER CURRENT

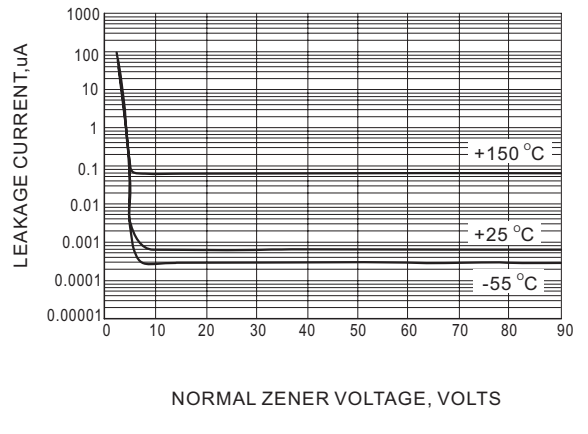


Fig.9 TYPICAL LEAKAGE CURRENT