

DATA SHEET

GMZJ2.0~GMZJ56

SURFACE MOUNT ZENER DIODES

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

MICRO-MELF Unit : inch (mm)

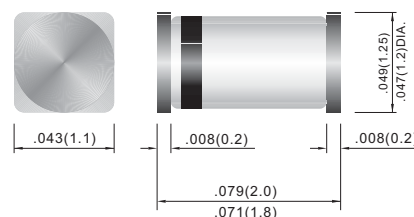
FEATURES

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

MECHANICAL DATA

- Case: Molded Glass MICRO-MELF
- 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	R _{thA}	--	--	0.3	K/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.					

Part Number	CLASS	Vz @ IzT		IZ (mA)	VR (V)	IR(μA) MAX	Izt (mA)	ZzT(Ω) MAX	Izk (mA)	Zzk(Ω) MAX
		Min. V	Max. V							
GMZJ 2.0	A	1.88	2.10	5	0.5	120	5	100	0.5	1000
	B	2.02	2.20							
GMZJ 2.2	A	2.12	2.30	5	0.7	100	5	100	0.5	1000
	B	2.22	2.41							
GMZJ 2.4	A	2.33	2.52	5	1.0	120	5	100	0.5	1000
	B	2.43	2.63							
GMZJ 2.7	A	2.54	2.75	5	1.0	100	5	110	0.5	1000
	B	2.69	2.91							
GMZJ 3.0	A	2.85	3.07	5	1.0	50	5	120	0.5	1000
	B	3.01	3.22							
GMZJ 3.3	A	3.16	3.38	5	1.0	20	5	120	0.5	1000
	B	3.32	3.53							
GMZJ 3.6	A	3.455	3.695	5	1.0	10	5	100	1	1000
	B	3.60	3.845							
GMZJ 3.9	A	3.74	4.01	5	1.0	5	5	100	1	1000
	B	3.89	4.16							
GMZJ 4.3	A	4.04	4.29	5	1.0	5	5	100	1	1000
	B	4.17	4.43							
	C	4.30	4.57							
GMZJ 4.7	A	4.44	4.68	5	1.0	5	5	90	1	900
	B	4.55	4.80							
	C	4.68	4.93							
GMZJ 5.1	A	4.81	5.07	5	1.5	5	5	80	1	800
	B	4.94	5.20							
	C	5.09	5.37							
GMZJ 5.6	A	5.28	5.55	5	2.5	5	5	60	1	500
	B	5.45	5.73							
	C	5.61	5.91							
GMZJ 6.2	A	5.78	6.09	5	3.0	5	5	60	1	300
	B	5.96	6.27							
	C	6.12	6.44							
GMZJ 6.8	A	6.29	6.63	5	3.5	2	5	20	0.5	150
	B	6.49	6.83							
	C	6.66	7.01							
GMZJ 7.5	A	6.85	7.22	5	4.0	0.5	5	20	0.5	120
	B	7.07	7.45							
	C	7.29	7.67							
GMZJ 8.2	A	7.53	7.92	5	5.0	0.5	5	20	0.5	120
	B	7.78	8.19							
	C	8.03	8.45							
GMZJ 9.1	A	8.29	8.73	5	6.0	0.5	5	25	0.5	120
	B	8.57	9.01							
	C	8.83	9.30							
GMZJ 10	A	9.12	9.59	5	7.0	0.2	5	30	0.5	120
	B	9.41	9.90							
	C	9.70	10.20							
	D	9.94	10.44							
GMZJ 11	A	10.18	10.71	5	8.0	0.2	5	30	0.5	120
	B	10.50	11.05							
	C	10.82	11.38							

Part Number	CLASS	Vz @ IzT		IZ (mA)	VR (V)	IR(μA) MAX	Izt (mA)	ZzT(Ω) MAX	Izk (mA)	Zzk(Ω) MAX
		Min. V	Max. V							
GMZJ 12	A	11.13	11.71	5	9.0	0.2	5	30	0.5	110
	B	11.44	12.03							
	C	11.74	12.35							
GMZJ 13	A	12.11	12.75	5	10	0.2	5	35	0.5	110
	B	12.55	13.21							
	C	12.99	13.66							
GMZJ 15	A	13.44	14.13	5	11	0.2	5	40	0.5	110
	B	13.89	14.62							
	C	14.35	15.09							
GMZJ 16	A	14.80	15.57	5	12	0.2	5	40	0.5	150
	B	15.25	16.04							
	C	15.69	16.51							
GMZJ 18	A	16.22	17.06	5	13	0.2	5	45	0.5	150
	B	16.82	17.70							
	C	17.42	18.33							
GMZJ 20	A	18.02	18.96	5	15	0.2	5	55	0.5	200
	B	18.63	19.59							
	C	19.23	20.22							
	D	19.72	20.72							
GMZJ 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							
GMZJ 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							
GMZJ 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							
GMZJ 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							
GMZJ 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							
GMZJ 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							
GMZJ 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							
GMZJ 43		40.00	45.00	5	33	0.2	5	90	--	--
GMZJ 47		44.00	49.00	5	36	0.2	5	90	--	--
GMZJ 51		48.00	54.00	5	39	0.2	5	110	--	--
GMZJ 56		53.00	60.00	5	43	0.2	5	110	--	--

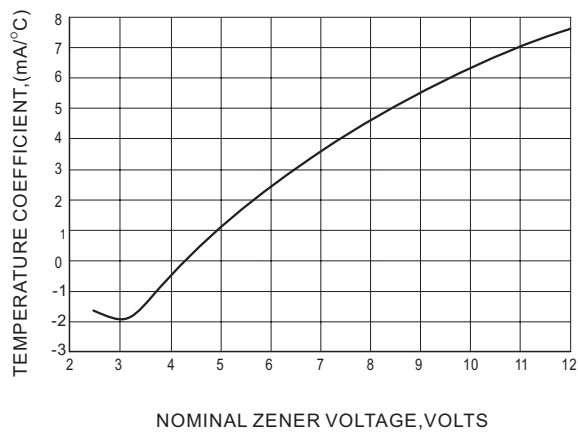


Fig.1 TEMPERATURE COEFFICIENTS

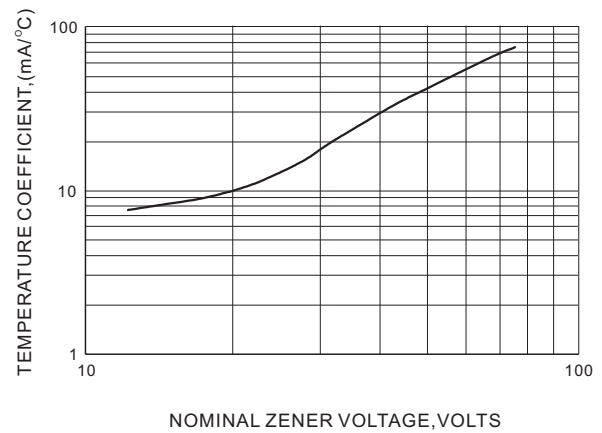


Fig.2 TEMPERATURE COEFFICIENTS

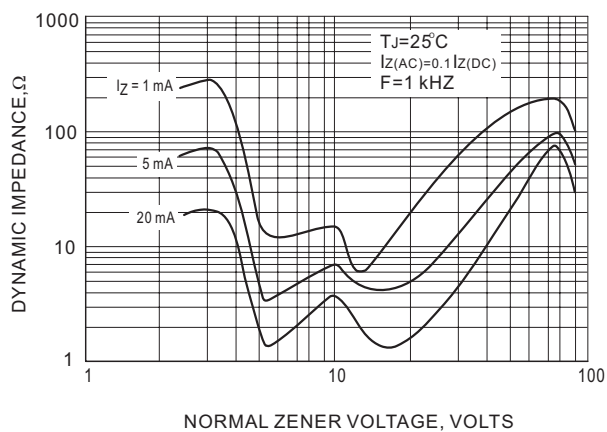


Fig.3 EFFECT OF ZENER VOLTAGE ON ZENER IMPEDANCE

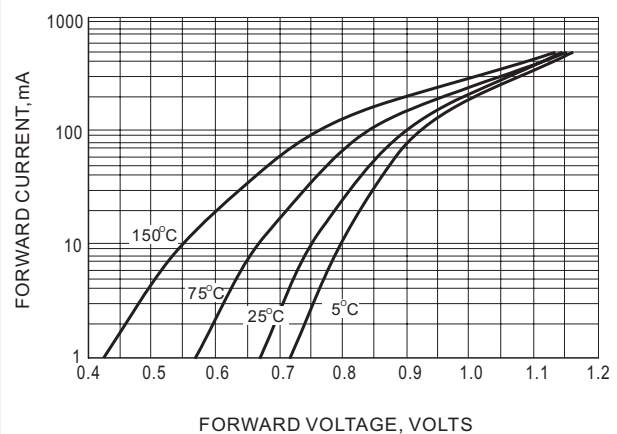


Fig.4 TYPICAL FORWARD VOLTAGE

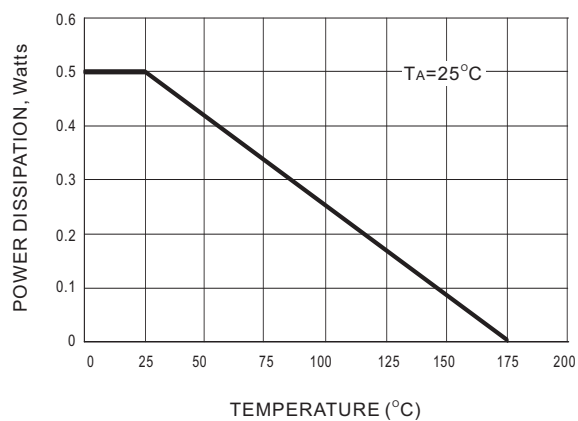


Fig.5 STEADY STATE POWER DERATING

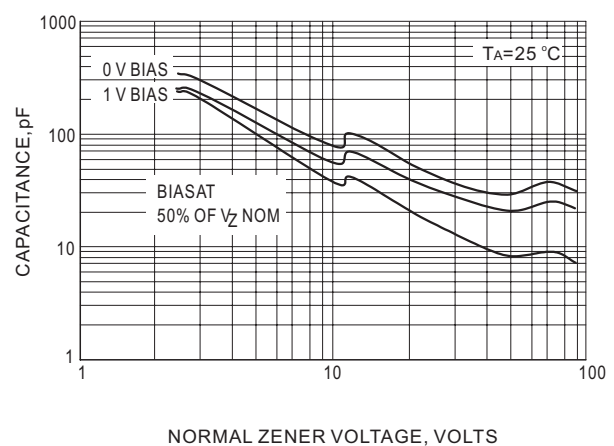


Fig.6 TYPICAL CAPACITANCE

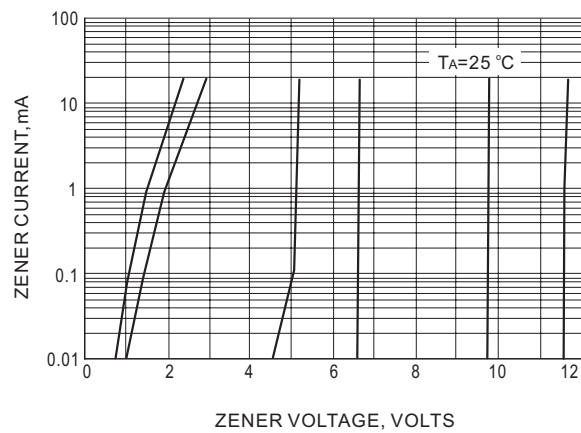


Fig.7 ZENER VOLTAGE VERSUS ZENER CURRENT

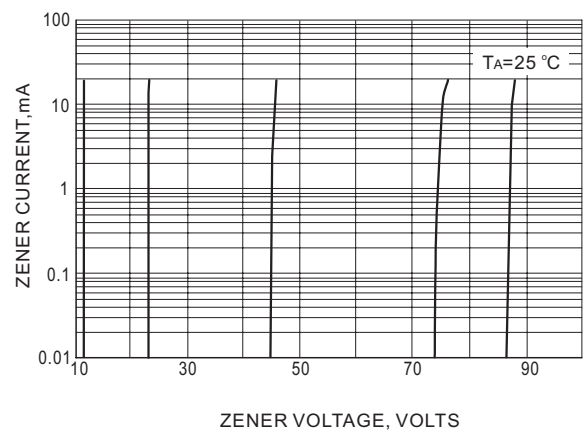


Fig.8 ZENER VOLTAGE VERSUS ZENER CURRENT

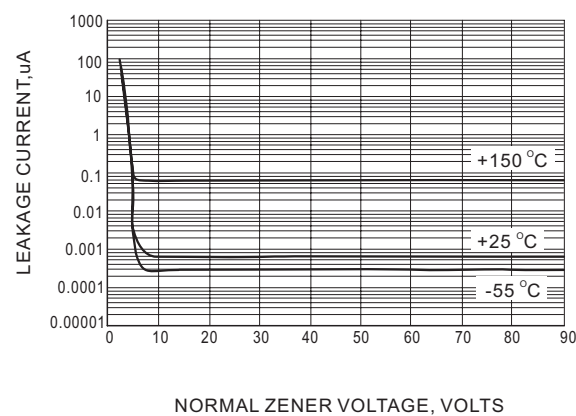


Fig.9 TYPICAL LEAKAGE CURRENT