



■ Features

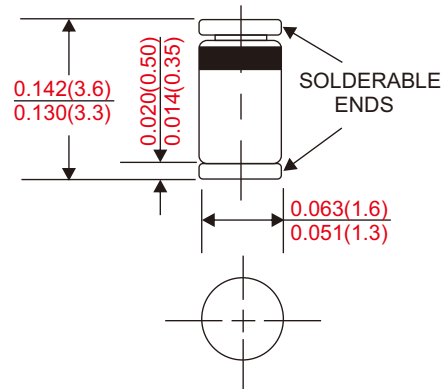
- Silicon epitaxial planar chip structure.
- Wide zener reverse voltage range 2.40V to 100V.
- Small package size for high density applications.
- Ideally suited for automated assembly processes.
- Lead free in compliance with EU RoHS.

■ Mechanical data

- Case : GLASS MINI-MELF / SOD-80
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Mounting Position : Any
- Weight : Approximated 0.030 gram

■ Outline

SOD-80



Dimensions in inches and (millimeters)

■ Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Power dissipation		P_D			500	mW
Forward voltage	$I_F = 200\text{mA}$	V_F			1.5	V
Storage temperature		T_{STG}	-55		+150	°C
Operating Junction temperature		T_J	-55		+175	°C



■ Electrical characteristics

Part No.	Zener voltage			Test current	Zener impedance			Leakage current		Typical Temperature Coefficient
	V _Z @ I _{ZT}			I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _{ZK}	I _R	V _R	TK _{VZ}
	Min.	Nom.	Max.	mA	OHMs	OHMs	mA	μA	Volts	% / W
ZMM55B2V0	1.96	2.0	2.04	5.0	100	600	1.0	150	1.0	-0.09~-0.06
ZMM55B2V2	2.12	2.2	2.24	5.0	100	600	1.0	150	1.0	-0.09~-0.06
ZMM55B2V4	2.35	2.4	2.45	5.0	85	600	1.0	50	1.0	-0.09~-0.06
ZMM55B2V7	2.65	2.7	2.75	5.0	85	600	1.0	10	1.0	-0.09~-0.06
ZMM55B3V0	2.94	3.0	3.06	5.0	85	600	1.0	4.0	1.0	-0.08~-0.05
ZMM55B3V3	3.23	3.3	3.37	5.0	85	600	1.0	2.0	1.0	-0.08~-0.05
ZMM55B3V6	3.53	3.6	3.67	5.0	85	600	1.0	2.0	1.0	-0.08~-0.05
ZMM55B3V9	3.82	3.9	3.98	5.0	85	600	1.0	2.0	1.0	-0.08~-0.05
ZMM55B4V3	4.21	4.3	4.39	5.0	75	600	1.0	1.0	1.0	-0.06~-0.03
ZMM55B4V7	4.61	4.7	4.79	5.0	60	600	1.0	0.5	1.0	-0.05~+0.02
ZMM55B5V1	5.00	5.1	5.20	5.0	35	550	1.0	0.1	1.0	-0.02~+0.02
ZMM55B5V6	5.49	5.6	5.71	5.0	25	450	1.0	0.1	1.0	-0.05~+0.05
ZMM55B6V2	6.08	6.2	6.32	5.0	10	200	1.0	0.1	2.0	0.03~0.06
ZMM55B6V8	6.66	6.8	6.94	5.0	8	150	1.0	0.1	3.0	0.03~0.07
ZMM55B7V5	7.35	7.5	7.65	5.0	7	50	1.0	0.1	5.0	0.03~0.07
ZMM55B8V2	8.04	8.2	8.36	5.0	7	50	1.0	0.1	6.2	0.03~0.08
ZMM55B9V1	8.92	9.1	9.28	5.0	10	50	1.0	0.1	6.8	0.03~0.09
ZMM55B10	9.8	10	10.2	5.0	15	70	1.0	0.1	7.5	0.03~0.10
ZMM55B11	10.8	11	11.2	5.0	20	70	1.0	0.1	8.2	0.03~0.11
ZMM55B12	11.8	12	12.2	5.0	20	90	1.0	0.1	9.1	0.03~0.11
ZMM55B13	12.7	13	13.3	5.0	26	110	1.0	0.1	10	0.03~0.11
ZMM55B15	14.7	15	15.3	5.0	30	110	1.0	0.1	11	0.03~0.11
ZMM55B16	15.7	16	16.3	5.0	40	170	1.0	0.1	12	0.03~0.11
ZMM55B18	17.6	18	18.4	5.0	50	170	1.0	0.1	13	0.03~0.11
ZMM55B20	19.6	20	20.4	5.0	55	220	1.0	0.1	15	0.03~0.11
ZMM55B22	21.6	22	22.4	5.0	55	220	1.0	0.1	16	0.04~0.12
ZMM55B24	23.5	24	24.5	5.0	80	220	1.0	0.1	18	0.04~0.12
ZMM55B27	26.5	27	27.5	5.0	80	220	1.0	0.1	20	0.04~0.12
ZMM55B30	29.4	30	30.6	5.0	80	220	1.0	0.1	22	0.04~0.12
ZMM55B33	32.3	33	33.7	5.0	80	220	1.0	0.1	24	0.04~0.12
ZMM55B36	35.3	36	36.7	5.0	80	220	1.0	0.1	27	0.04~0.12
ZMM55B39	38.2	39	39.8	2.5	90	500	1.0	0.1	30	0.04~0.12
ZMM55B43	42.1	43	43.9	2.5	90	600	0.5	0.1	33	0.04~0.12
ZMM55B47	46.1	47	47.9	2.5	110	700	0.5	0.1	36	0.04~0.12
ZMM55B51	50.0	51	52.0	2.5	125	700	0.5	0.1	39	0.04~0.12
ZMM55B56	54.9	56	57.1	2.5	135	1000	0.5	0.1	43	0.04~0.12
ZMM55B62	60.8	62	63.2	2.5	150	1000	0.5	0.1	47	0.04~0.12
ZMM55B68	66.6	68	69.4	2.5	200	1000	0.5	0.1	51	0.04~0.12
ZMM55B75	73.5	75	76.5	2.5	250	1500	0.5	0.1	56	0.04~0.12
ZMM55B82	80.4	82	83.6	2.5	300	2000	0.5	0.1	62	0.04~0.12
ZMM55B91	89.2	91	92.8	1.0	450	5000	0.1	0.1	68	0.04~0.12
ZMM55B100	98	100	102	1.0	450	5000	0.1	0.1	75	0.04~0.12

Note : 2% tolerance of Zener voltage



Rating and characteristic curves

FIG. 1-TOTAL POWER DISSIPATION VS. AMBIENT TEMPERATURE

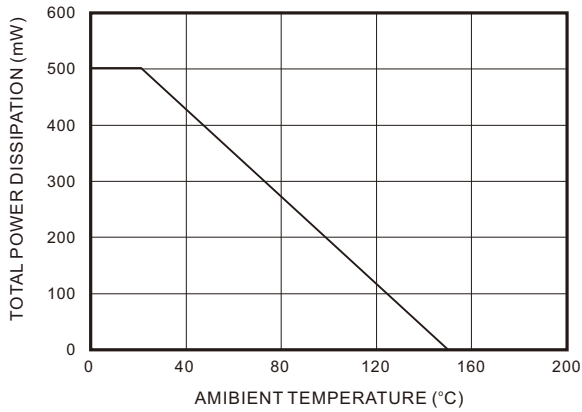


FIG. 2-TYPICAL CHANGE OF WORKING VOLTAGE UNDER OPERATING CONDITIONS AT $T_A = 25^\circ\text{C}$

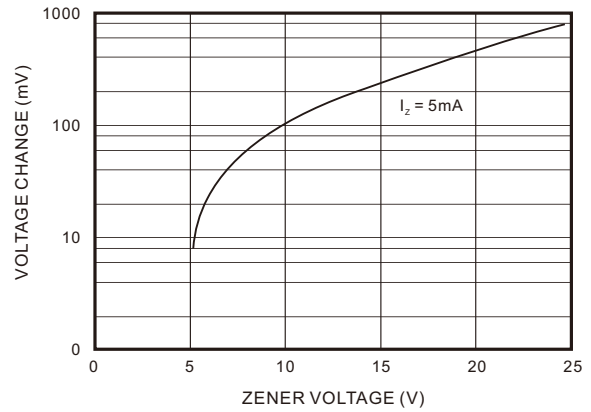


FIG. 3-TYPICAL CHANGE OF WORKING VOLTAGE VS. JUNCTION TEMPERATURE

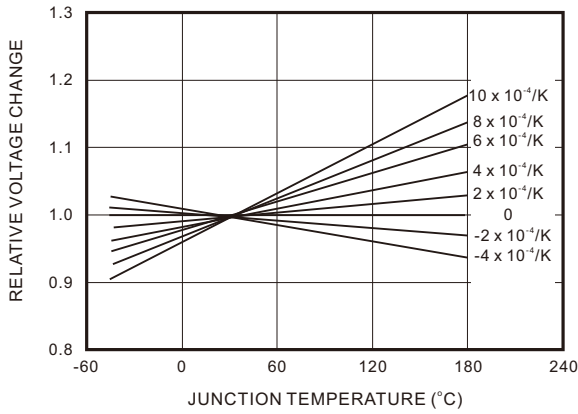


FIG. 4-TEMPERATURE COEFFICIENT OF VZ VS. Z-VOLTAGE

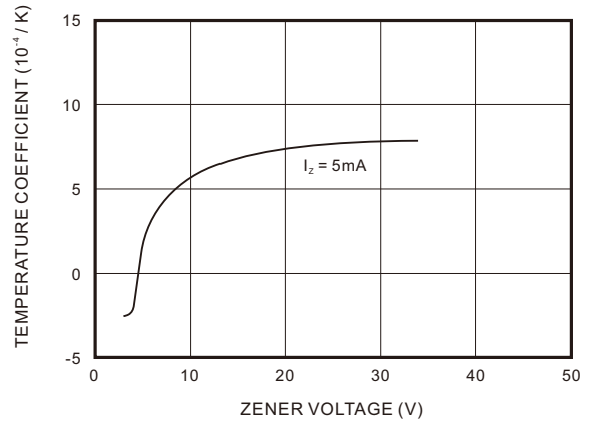
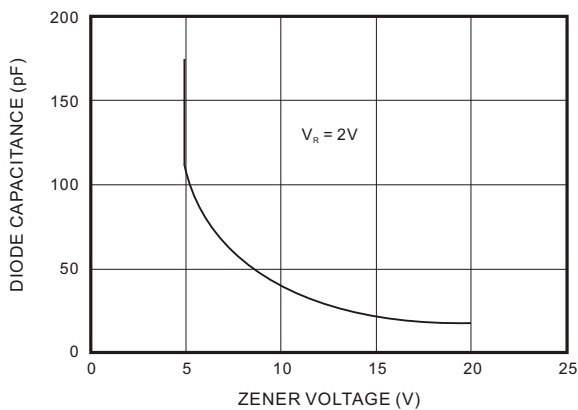


FIG. 5-DIODE CAPACITANCE VS. Z-VOLTAGE





■ Rating and characteristic curves

FIG. 6-FORWARD CURRENT VS. FORWARD VOLTAGE

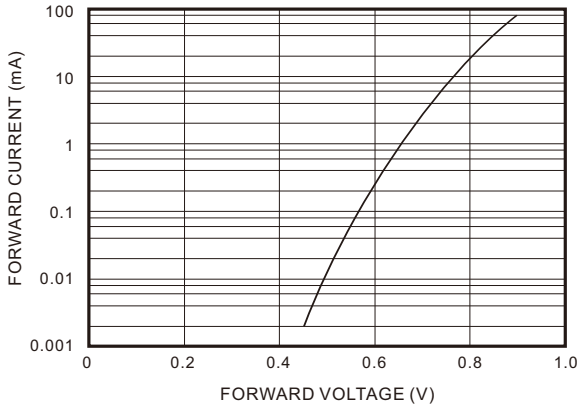


FIG. 7-Z-CURRENT VS. Z-VOLTAGE

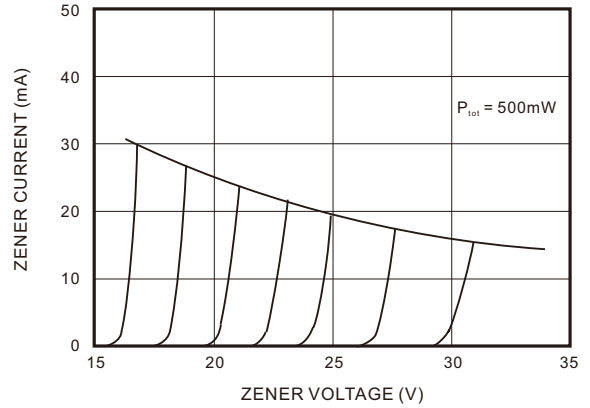


FIG. 8-Z-CURRENT VS. Z-VOLTAGE

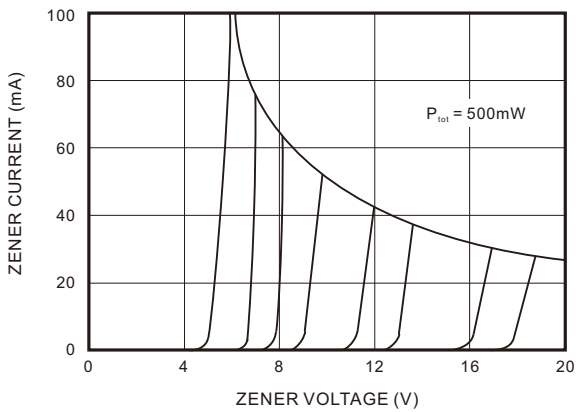


FIG. 9-DIFFERENTIAL Z-RESISTANCE VS. Z-VOLTAGE

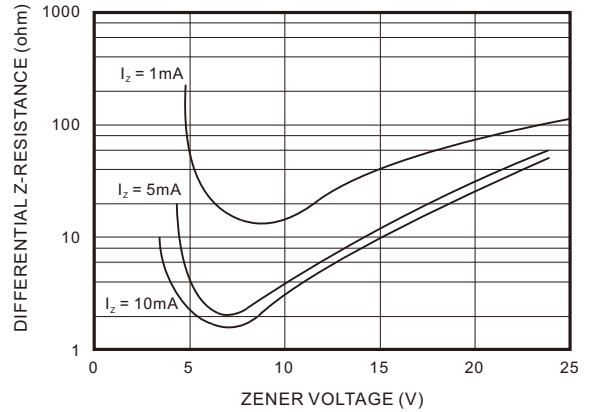
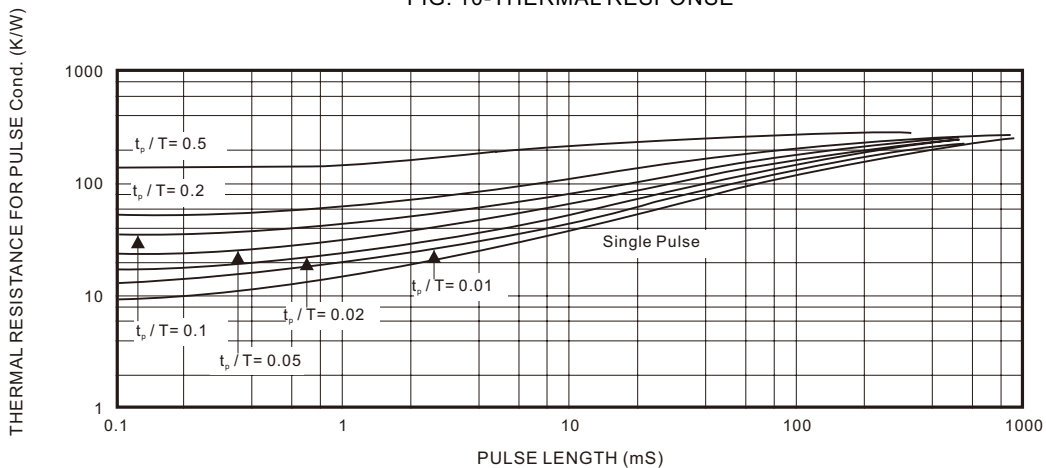
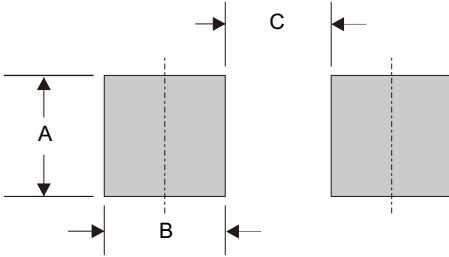


FIG. 10-THERMAL RESPONSE





■ SOD-80 foot print



A	B	C
0.071 (1.80)	0.035 (0.90)	0.102 (2.60)

Dimensions in inches and (millimeters)

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Zener Diodes](#) category:

Click to view products by [LGE](#) manufacturer:

Other Similar products are found below :

[RKZ13B2KG#P1](#) [DL5234B](#) [1N4682](#) [1N4693](#) [1N4732A](#) [1N4736A](#) [1N4750A](#) [1N4759ARL](#) [1N5241B](#) [1N5365B](#) [1N5369B](#) [1N747A](#)
[1N964B](#) [1N966B](#) [1N968B](#) [1N972B](#) [JANS1N4974US](#) [JANTX1N5907](#) [1N4692](#) [1N4702](#) [1N4704](#) [1N4711](#) [1N4714](#) [1N4745ARL](#)
[1N4752ARL](#) [1N4760ARL](#) [1N5221B](#) [1N5242BTR](#) [1N5350B](#) [1N5352B](#) [1N961BRR1](#) [1N964BRL](#) [RKZ5.1BKU#P6](#) [3SMAJ5946B-TP](#)
[3SMAJ5950B-TP](#) [MMSZ5230BQ-13-F](#) [MMSZ5232BQ-13-F](#) [BZX84C7V5](#) [3SMAJ5945B-TP](#) [3SMAJ5947B-TP](#) [3SMBJ5941B-TP](#)
[DZ2S240M0L](#) [SMAZ27-TP](#) [ZMM5224B-7](#) [RD16UM-T1-A](#) [RD10S-T1-A](#) [CDZT2R5.6B](#) [1N4762A G](#) [Z1SMA18](#) [JANTX1N4553B](#)