

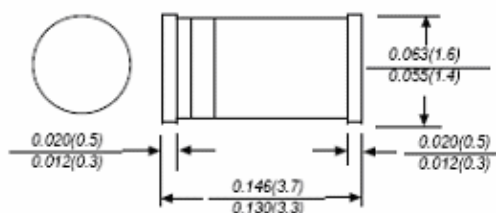


BZV55C/ZMM55C-SERIES

ZENER DIODES

Zener Voltage: 2.4-180V Peak Pulse Power: 500mW

MINI MELF



FEATURE

- Low zener impedance
- Low regulation factor
- Glass passivated junction
- High temperature soldering guaranteed:
260°C/10S at terminals
- This is a Pb - Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

MECHANICAL DATA

Case: MINI MELF molded glass body

Terminals: Plated axial leads, solderable per MIL-STD 750, method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.002 ounce, 0.05 gram

Marking: Part Name, SSG and Date Code

ORDERING INFORMATION

Device	Package	Shipping
BZV55C/ZMM55C-SERIES	MELF (Pb-Free)	5000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	VALUE	UNITS
Zener Current see Table Characteristics			
Power Dissipation at Tamb=25°C(Note 1)	P _{tot}	500	mW
Junction Temperature	T _j	200	°C
Storage Temperature Range	T _{sto}	-65 to + 200	°C
Thermal resistance junction ambient(Note 1)	R _{θJA}	0.3	K/mW
Forward voltage at I _F =100mA	V _F	1.0	V

Note 1: Valid provided that leads at a distance of 10mm from case are kept at ambient temperature



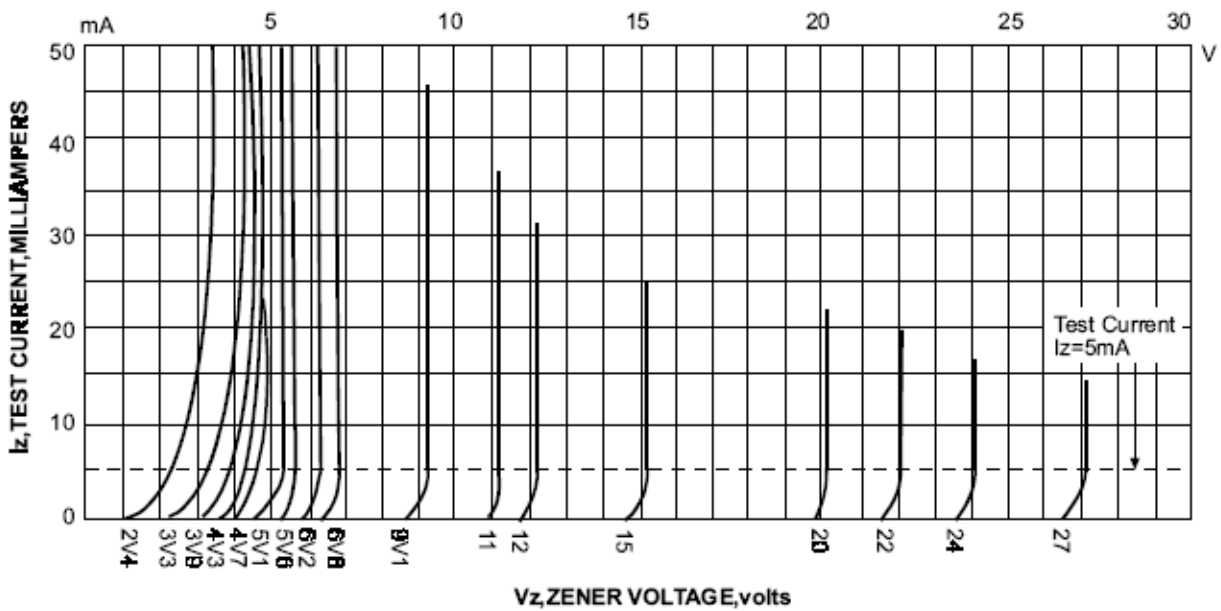
ELECTRICAL CHARACTERISTICS (at TA=25°C unless otherwise noted)

Device Type	Nominal Zener Voltage Vz@Izr		Test Current Izr mA	Maximum Zener Impedance			Maximum Reverse Leakage Current		Typical Temperature Coefficient (%/°C)	Maximum Regulator Current IzM mA
	Min	Max		ZzT@Izr Ohms	Zzk@Izk Ohms	Izk mA	IR µA	@VR Volts		
BZV/ZMM55C2V4	2.28	2.56	5.0	85	600	1.0	50	1.0	-0.085	155
BZV/ZMM55C2V7	2.5	2.9	5.0	85	600	1.0	10	1.0	-0.080	135
BZV/ZMM55C3V0	2.8	3.2	5.0	85	600	1.0	4.0	1.0	-0.075	125
BZV/ZMM55C3V3	3.1	3.5	5.0	85	600	1.0	2.0	1.0	-0.070	115
BZV/ZMM55C3V6	3.4	3.8	5.0	85	600	1.0	2.0	1.0	-0.065	105
BZV/ZMM55C3V9	3.7	4.1	5.0	85	600	1.0	2.0	1.0	-0.060	95
BZV/ZMM55C4C3	4.0	4.6	5.0	75	600	1.0	1.0	1.0	±0.055	90
BZV/ZMM55C4V7	4.4	5.0	5.0	60	600	1.0	0.5	1.0	±0.030	85
BZV/ZMM55C5V1	4.8	5.4	5.0	35	550	1.0	0.1	1.0	±0.030	80
BZV/ZMM55C5V6	5.2	6.0	5.0	25	450	1.0	0.1	1.0	+0.038	70
BZV/ZMM55C6V2	5.8	6.6	5.0	10	200	1.0	0.1	2.0	+0.045	64
BZV/ZMM55C6V8	6.4	7.2	5.0	8	150	1.0	0.1	3.0	+0.050	58
BZV/ZMM55C7V5	7.0	7.9	5.0	7	50	1.0	0.1	5.0	+0.058	53
BZV/ZMM55C8V2	7.7	8.7	5.0	7	50	1.0	0.1	6.2	+0.062	74
BZV/ZMM55C9V1	8.5	9.6	5.0	10	50	1.0	0.1	6.8	+0.068	43
BZV/ZMM55C10	9.4	10.6	5.0	15	70	1.0	0.1	7.5	+0.075	40
BZV/ZMM55C11	10.4	11.6	5.0	20	70	1.0	0.1	8.2	+0.076	36
BZV/ZMM55C12	11.4	12.7	5.0	20	90	1.0	0.1	9.1	+0.077	32
BZV/ZMM55C13	12.4	14.1	5.0	26	110	1.0	0.1	10	+0.079	29
BZV/ZMM55C15	13.8	15.6	5.0	30	110	1.0	0.1	11	+0.082	27
BZV/ZMM55C16	15.3	17.1	5.0	40	170	1.0	0.1	12	+0.083	24
BZV/ZMM55C18	16.8	19.1	5.0	50	170	1.0	0.1	13	+0.085	21
BZV/ZMM55C20	18.8	21.2	5.0	55	220	1.0	0.1	15	+0.086	20
BZV/ZMM55C22	20.8	23.3	5.0	55	220	1.0	0.1	16	+0.087	18
BZV/ZMM55C24	22.8	25.6	5.0	80	220	1.0	0.1	18	+0.088	16
BZV/ZMM55C27	25.1	28.9	5.0	80	220	1.0	0.1	20	+0.090	14
BZV/ZMM55C30	28	32	5.0	80	220	1.0	0.1	22	+0.091	13
BZV/ZMM55C33	31	35	5.0	80	220	1.0	0.1	24	+0.092	12
BZV/ZMM55C36	34	38	5.0	80	220	1.0	0.1	27	+0.093	11
BZV/ZMM55C39	37	41	2.5	90	500	0.5	0.1	30	+0.094	10
BZV/ZMM55C43	40	46	2.5	90	600	0.5	0.1	33	+0.095	9.2
BZV/ZMM55C47	44	50	2.5	110	700	0.5	0.1	36	+0.095	8.5
BZV/ZMM55C51	48	54	2.5	125	700	0.5	0.1	39	+0.096	7.8
BZV/ZMM55C56	52	60	2.5	135	1000	0.5	0.1	43	+0.096	7.0
BZV/ZMM55C62	58	66	2.5	150	1000	0.5	0.1	47	+0.096	6.4
BZV/ZMM55C68	64	72	2.5	200	1000	0.5	0.1	51	+0.096	5.9
BZV/ZMM55C75	70	80	2.5	250	1500	0.5	0.1	56	+0.096	5.3
BZV/ZMM55C82	77	87	2.5	300	2000	0.5	0.1	62	+0.096	4.8
BZV/ZMM55C91	85	96	1.0	450	5000	0.1	0.1	68	+0.096	4.4
BZV/ZMM55C100	94	106	1.0	450	5000	0.1	0.1	75	+0.096	4.0
BZV/ZMM55C110	104	116	1.0	600	5000	0.1	0.1	82	+0.096	3.6
BZV/ZMM55C120	114	127	1.0	800	5000	0.1	0.1	91	+0.096	3.3
BZV/ZMM55C130	124	141	1.0	1000	5000	0.1	0.1	100	+0.096	3.0
BZV/ZMM55C150	138	156	1.0	1200	5000	0.1	0.1	110	+0.096	2.6
BZV/ZMM55C160	153	171	1.0	1500	5000	0.1	0.1	120	+0.096	2.5
BZV/ZMM55C180	168	191	1.0	1800	5000	0.1	0.1	130	+0.096	2.2
BZV/ZMM55C188	188	212	1.0	2000	5000	0.1	0.1	150	+0.096	2.0



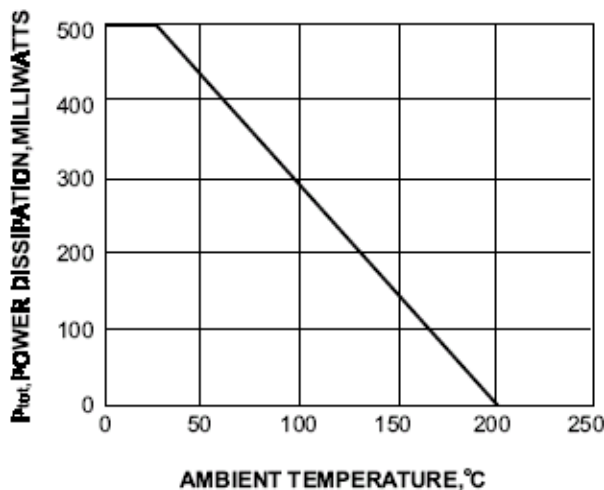
RATINGS AND CHARACTERISTIC CURVES BZV/ZMM55-SERIES

Breakdown characteristics



Admissible power dissipation versus ambient temperature

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



DISCLAIMER:

- 1- The information given herein, including the specifications and dimensions, is subject to change without prior notice to improve product characteristics. Before ordering, purchasers are advised to contact the SMC - Sangdest Microelectronics (Nanjing) Co., Ltd sales department for the latest version of the datasheet(s).
- 2- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment , and safety equipment) , safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement .
- 3- In no event shall SMC - Sangdest Microelectronics (Nanjing) Co., Ltd be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). SMC - Sangdest Microelectronics (Nanjing) Co., Ltd assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets.
- 4- In no event shall SMC - Sangdest Microelectronics (Nanjing) Co., Ltd be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.
- 5- No license is granted by the datasheet(s) under any patents or other rights of any third party or SMC - Sangdest Microelectronics (Nanjing) Co., Ltd.
- 6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed written permission of SMC - Sangdest Microelectronics (Nanjing) Co., Ltd.
- 7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations..