

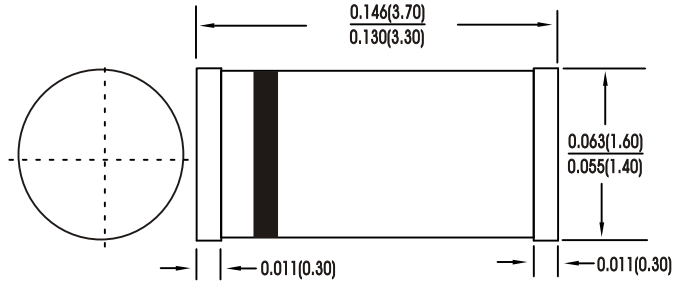
ZMM55C(A)(B)(F)2V4 THRU ZMM55C(A)(B)(F)75

SURFACE MOUNT ZENER DIODES

FEATURES:

- Standard Zener voltage tolerance is $\pm 5\%$ AND
 SUFFIX "ZMM55A" FOR $\pm 1\%$ of V_{ZNOM}
 SUFFIX "ZMM55B" FOR $\pm 2\%$ of V_{ZNOM}
 SUFFIX "ZMM55C" FOR $\pm 5\%$ of V_{ZNOM}
 SUFFIX "ZMM55F" FOR $\pm 3\%$ of V_{ZNOM}
- Small surface mounting type
- High reliability

MINI-MELF SOD-80/DO-213AA



MECHANICAL DATA

Case: MINI MELF Molded Glass

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25° C ambient temp. unless otherwise specified.

Characteristic	Symbol	Value	Units
Power Dissipation at $T_{amb}=25^{\circ}\text{C}$ / $R_{thJ-A} \leq 300\text{K/W}$	P_V	0.5	W
Z-current	I_Z	P_V/V_Z	mA
Thermal Resistance Junction to Ambient Air	R_{thJ-A}	500 ¹⁾	K/W
Maximum instantaneous forward voltage drop at $I_F=200\text{mADC}$	V_F	1.5	Volts
Junction temperature	T_J	175	°C
Storage temperature range	T_{stg}	-65 to +175	°C

1) Test Conditions : on PC board 50mm X 50 mm X 1.6mm

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Device Type	Nominal Zener Voltage V _{ZNOM}	Nominal Zener Voltage V _Z ¹⁾ at I _{ZT}	Test Current I _{ZT}	Maximum Zener Impedance			Maximum Reverse Leakage Current			Typical Temperature coefficient TK _{vz}
				Z _{ZT} at I _{ZT}	Z _{ZK} at I _{ZK}	I _{ZK}	I _R	I _R ²⁾	Test Voltage	
	Volts	Volts	mA	Ω	Ω	mA	μA	mA	Volts	%/K
ZMM55C2V4	2.4	2.28-2.56	5	85	600	1.0	50	100	1.0	-0.090~-0.060
ZMM55C2V7	2.7	2.5-2.9	5	85	600	1.0	10	50	1.0	-0.090~-0.060
ZMM55C3V0	3.0	2.8-3.2	5	85	600	1.0	4	40	1.0	-0.080~-0.050
ZMM55C3V3	3.3	3.1-3.5	5	85	600	1.0	2	40	1.0	-0.080~-0.050
ZMM55C3V6	3.6	3.4-3.8	5	85	600	1.0	2	40	1.0	-0.080~-0.050
ZMM55C3V9	3.9	3.7-4.1	5	85	600	1.0	2	40	1.0	-0.080~-0.050
ZMM55C4V3	4.3	4.0-4.6	5	75	600	1.0	1	20	1.0	-0.060~+0.030
ZMM55C4V7	4.7	4.4-5.0	5	60	600	1.0	0.5	10	1.0	-0.050~+0.020
ZMM55C5V1	5.1	4.8-5.4	5	35	550	1.0	0.1	2.0	1.0	-0.020~+0.020
ZMM55C5V6	5.6	5.2-6.0	5	25	450	1.0	0.1	2.0	1.0	-0.050~+0.050
ZMM55C6V2	6.2	5.8-6.6	5	10	200	1.0	0.1	2.0	2.0	0.030~0.060
ZMM55C6V8	6.8	6.4-7.2	5	8	150	1.0	0.1	2.0	3.0	0.030~0.070
ZMM55C7V5	7.5	7.0-7.9	5	7	50	1.0	0.1	2.0	5.0	0.030~0.070
ZMM55C8V2	8.2	7.7-8.7	5	7	50	1.0	0.1	2.0	6.2	0.030~0.080
ZMM55C9V1	9.1	8.5-9.6	5	10	50	1.0	0.1	2.0	6.8	0.030~0.090
ZMM55C10	10	9.4-10.6	5	15	70	1.0	0.1	2.0	7.5	0.030~0.100
ZMM55C11	11	10.4-11.6	5	20	70	1.0	0.1	2.0	8.2	0.030~0.110
ZMM55C12	12	11.4-12.7	5	20	90	1.0	0.1	2.0	9.1	0.030~0.110
ZMM55C13	13	12.4-14.1	5	26	110	1.0	0.1	2.0	10	0.030~0.110
ZMM55C15	15	13.8-15.6	5	30	110	1.0	0.1	2.0	11	0.030~0.110
ZMM55C16	16	15.3-17.1	5	40	170	1.0	0.1	2.0	12	0.030~0.110
ZMM55C18	18	16.8-19.1	5	50	170	1.0	0.1	2.0	13	0.030~0.110
ZMM55C20	20	18.8-21.2	5	55	220	1.0	0.1	2.0	15	0.030~0.110
ZMM55C22	22	20.8-23.3	5	55	220	1.0	0.1	2.0	16	0.040~0.120
ZMM55C24	24	22.8-25.6	5	80	220	1.0	0.1	2.0	18	0.040~0.120
ZMM55C27	27	25.1-28.9	5	80	220	1.0	0.1	2.0	20	0.040~0.120
ZMM55C30	30	28-32	5	80	220	1.0	0.1	2.0	22	0.040~0.120
ZMM55C33	33	31-35	5	80	220	1.0	0.1	2.0	24	0.040~0.120
ZMM55C36	36	34-38	5	80	220	1.0	0.1	2.0	27	0.040~0.120
ZMM55C39	39	37-41	2.5	90	500	0.5	0.1	5.0	30	0.040~0.120
ZMM55C43	43	40-46	2.5	90	600	0.5	0.1	5.0	33	0.040~0.120
ZMM55C47	47	44-50	2.5	110	700	0.5	0.1	5.0	36	0.040~0.120
ZMM55C51	51	48-54	2.5	125	700	0.5	0.1	10	39	0.040~0.120
ZMM55C56	56	52-60	2.5	135	1000	0.5	0.1	10	43	0.040~0.120
ZMM55C62	62	58-66	2.5	150	1000	0.5	0.1	10	47	0.040~0.120
ZMM55C68	68	64-72	2.5	200	1000	0.5	0.1	10	51	0.040~0.120
ZMM55C75	75	70-79	2.5	250	1500	0.5	0.1	10	56	0.040~0.120

1) Tighter tolerances available request :

ZMM55A----±1% of V_{ZNOM}

ZMM55B----±2% of V_{ZNOM}

ZMM55C----±5% of V_{ZNOM}

ZMM55F----±3% of V_{ZNOM}

2) at T_j=150 °C

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FIGURE.1-TOTAL POWER DISSIPATION CHARACTERISTICS

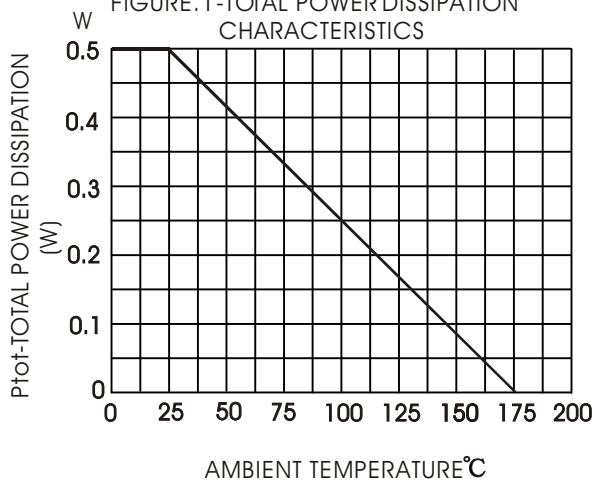


FIGURE.2-TYPICAL CHANGE OF WORKING VOLTAGE CHARACTERISTICS

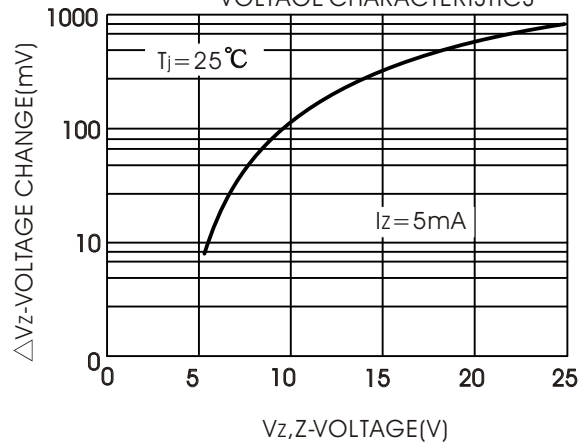


FIGURE.3-TYPICAL CHANGE OF WORKING VOLTAGE CHARACTERISTICS

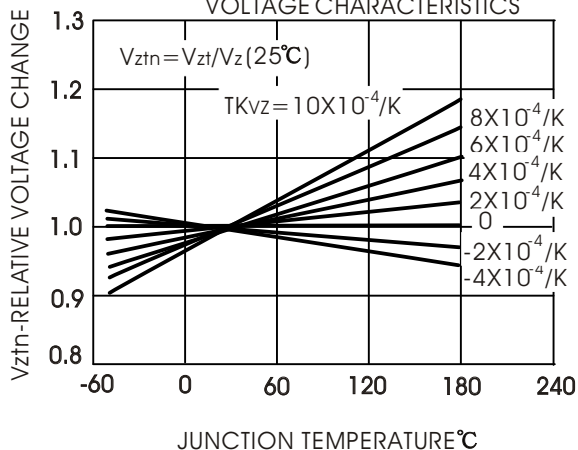


FIGURE.4-TEMPERATURE COEFFICIENT CHARACTERISTICS

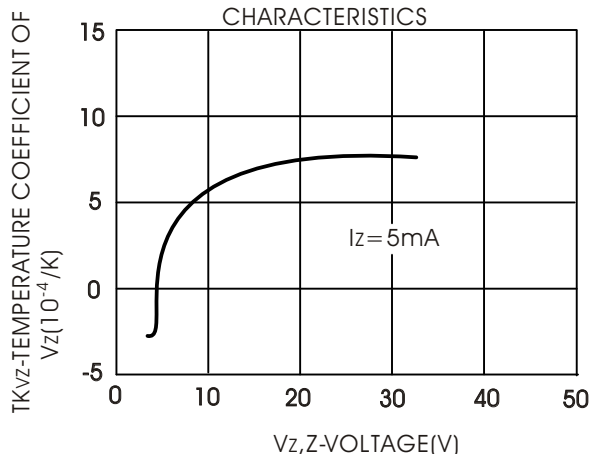


FIGURE.5-DIODE CAPACITANCE CHARACTERISTICS

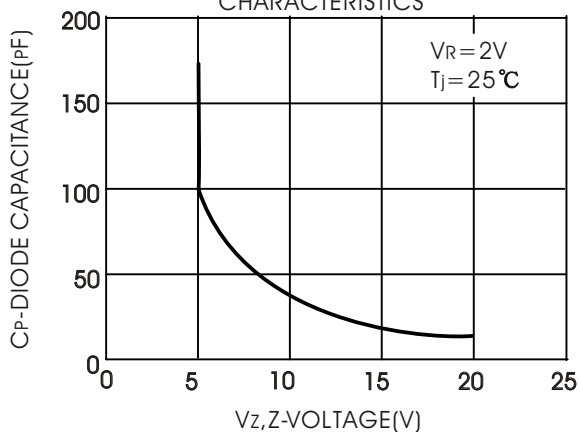
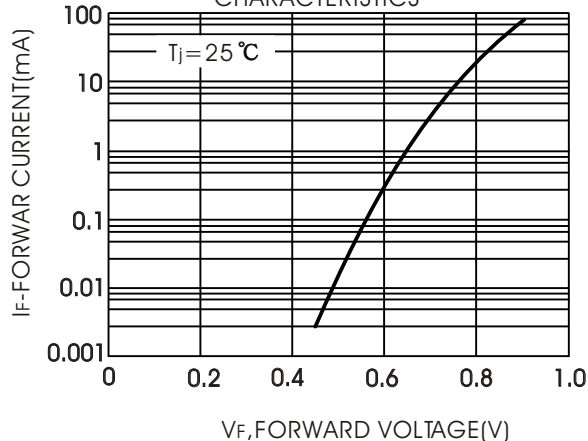


FIGURE.6-FORWARD CURRENT CHARACTERISTICS



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