

ZMM55C – SERIES(500mW)

SURFACE MOUNT ZENER DIODES/MINI – MELF



Device Type	Nominal zener Voltage Vz at IzT*	Test Current IzT	Maximum Zener Impedance		Typical Temperature coefficient	Maximum Reverse Leakage Current		Maximum Regulator Current IzM
			ZzT at IzT	Zzk at Izk = 1mA		IR	Test – Voltage suffix B	
	Volts	mA	Ω	Ω	%/°C	μA	Volts	mA
ZMM55 – C2V4	2.28 – 2.56	5	85	600	-0.070	50	1.0	150
ZMM55 – C2V7	2.5 – 2.9	5	85	600	-0.070	10	1.0	135
ZMM55 – C3V0	2.8 – 3.2	5	85	600	-0.070	4	1.0	125
ZMM55 – C3V3	3.1 – 3.5	5	85	600	-0.065	2	1.0	115
ZMM55 – C3V6	3.4 – 3.8	5	85	600	-0.060	2	1.0	105
ZMM55 – C3V9	3.7 – 4.1	5	85	600	-0.050	2	1.0	95
ZMM55 – C4V3	4.0 – 4.6	5	75	600	-0.025	1	1.0	90
ZMM55 – C4V7	4.4 – 5.0	5	60	600	-0.010	0.5	1.0	85
ZMM55 – C5V1	4.8 – 5.4	5	35	550	+0.015	0.1	1.0	80
ZMM55 – C5V6	5.2 – 6.0	5	25	450	+0.025	0.1	1.0	70
ZMM55 – C6V2	5.8 – 6.6	5	10	200	+0.035	0.1	2.0	64
ZMM55 – C6V8	6.4 – 7.2	5	8	150	+0.045	0.1	3.0	58
ZMM55 – C7V5	7.0 – 7.9	5	7	50	+0.050	0.1	5.0	53
ZMM55 – C8V2	7.7 – 8.7	5	7	50	+0.050	0.1	6.0	47
ZMM55 – C9V1	8.5 – 9.6	5	10	50	+0.060	0.1	7.0	43
ZMM55 – C10	9.4 – 10.6	5	15	70	+0.070	0.1	7.5	40
ZMM55 – C11	10.4 – 11.6	5	20	70	+0.070	0.1	8.5	36
ZMM55 – C12	11.4 – 12.7	5	20	90	+0.070	0.1	9.0	32
ZMM55 – C13	12.4 – 14.1	5	26	110	+0.070	0.1	10	29
ZMM55 – C15	13.8 – 15.6	5	30	110	+0.070	0.1	11	27
ZMM55 – C16	15.3 – 17.1	5	40	170	+0.070	0.1	12	24
ZMM55 – C18	16.8 – 19.1	5	50	170	+0.070	0.1	14	21
ZMM55 – C20	18.8 – 21.2	5	55	220	+0.070	0.1	15	20
ZMM55 – C22	20.8 – 23.3	5	55	220	+0.070	0.1	17	18
ZMM55 – C24	22.8 – 25.6	5	80	220	+0.080	0.1	18	16
ZMM55 – C27	25.1 – 28.9	5	80	220	+0.080	0.1	20	14
ZMM55 – C30	28 – 32	5	80	220	+0.080	0.1	22	13
ZMM55 – C33	31 – 35	5	80	220	+0.080	0.1	24	12
ZMM55 – C36	34 – 38	5	80	220	+0.080	0.1	27	11
ZMM55 – C39	37 – 41	2.5	90	500	+0.080	0.1	30	10
ZMM55 – C43	40 – 46	2.5	90	600	+0.080	0.1	33	9.2
ZMM55 – C47	44 – 50	2.5	110	700	+0.080	0.1	36	8.5

STANDARD VOLTAGE TOLERANCE IS + 5%

AND:

SUFFIX "A" FOR $\pm 1\%$

SUFFIX "B" FOR $\pm 2\%$

SUFFIX "C" FOR $\pm 5\%$

SUFFIX "D" FOR $\pm 20\%$

1. STANDARD ZENER DIODE 500MW

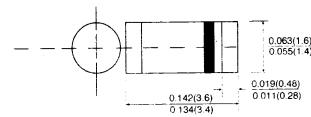
VZ TOLERANCE = $\pm 5\%$

2. ZMM = ZENER MINI MELF

3. VZ OF ZENER DIODE, V CODE IS
INSTEAD OF DECIMAL POINT

e.g., 3V6 = 3.6V

* MEASURED WITH PULSES Tp = 20m SEC.



DIMENSIONS IN INCHES AND (MILLIMETERS)



ZMM55C - SERIES

SURFACE MOUNT ZENER DIODES

Absolute Maximum Ratings

	Symbol	Value	Unit
Zener Current see Table "Characteristics"			
Power Dissipation at $T_{amb} = 25^\circ\text{C}$	P_{tot}	500*	mW
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_s	-55 to +175	$^\circ\text{C}$

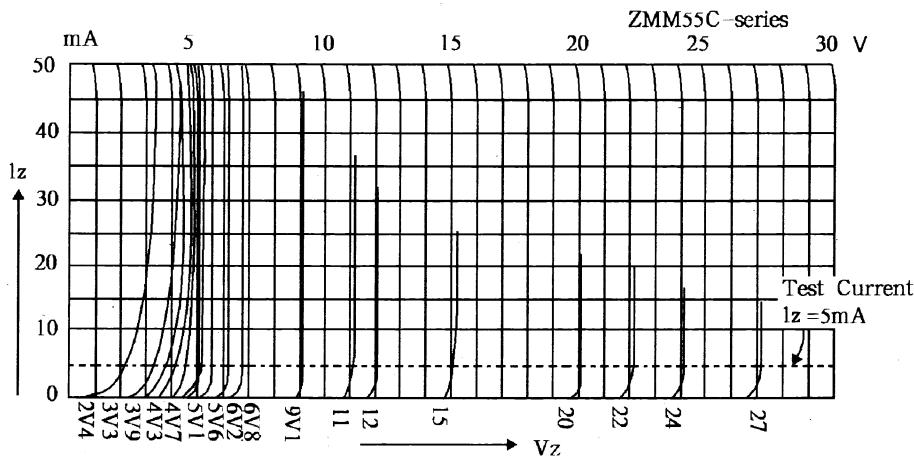
* Valid provided that leads are kept at ambient temperature at a distance of 8mm from case

Characteristic at $T_{amb} = 25^\circ\text{C}$

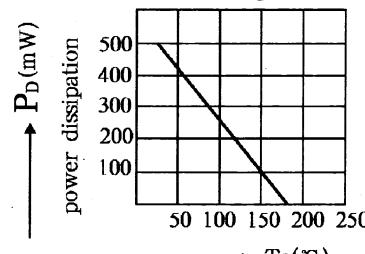
	Symbol	Min.	Typ.	Max.	Unit
Thermal Resistance Junction to Ambient Air	R_{thA}	-	-	0.3*	K/mW
Forward Voltage at $I_F = 100\text{mA}$	V_F	-	-	1	V

* Valid provided that leads are kept at ambient temperature at a distance of 8mm from case.

Breakdown characteristics



changes in the power dissipation due to the ambient temperature.



Ambient Temperature