

# ZMM55C(A)(B)(D)2V4 THRU ZMM55C(A)(B)(D)47

## SURFACE MOUNT ZENER DIODES

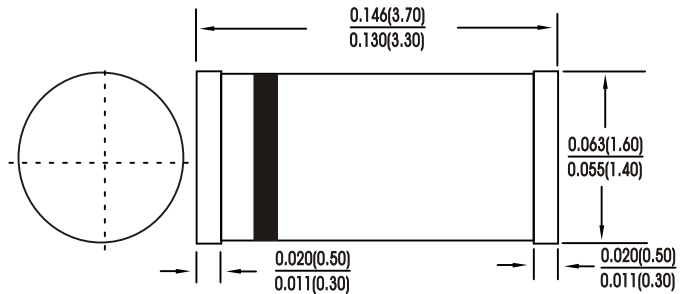
### FEATURES:

- Standard Zener voltage tolerance is  $\pm 5\%$  AND  
 SUFFIX "ZMM55A" FOR  $\pm 1\%$   
 SUFFIX "ZMM55B" FOR  $\pm 2\%$   
 SUFFIX "ZMM55C" FOR  $\pm 5\%$   
 SUFFIX "ZMM55D" FOR  $\pm 20\%$
- These diodes are also available in QUADRO MELF case with the type designation ZMM55C(A)(B)(D)2V4..... ZMM55C(A)(B)(D)47

### MECHANICAL DATA

Case: MINI MELF Molded Glass

### MINI-MELF SOD-80/DO-213AA



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

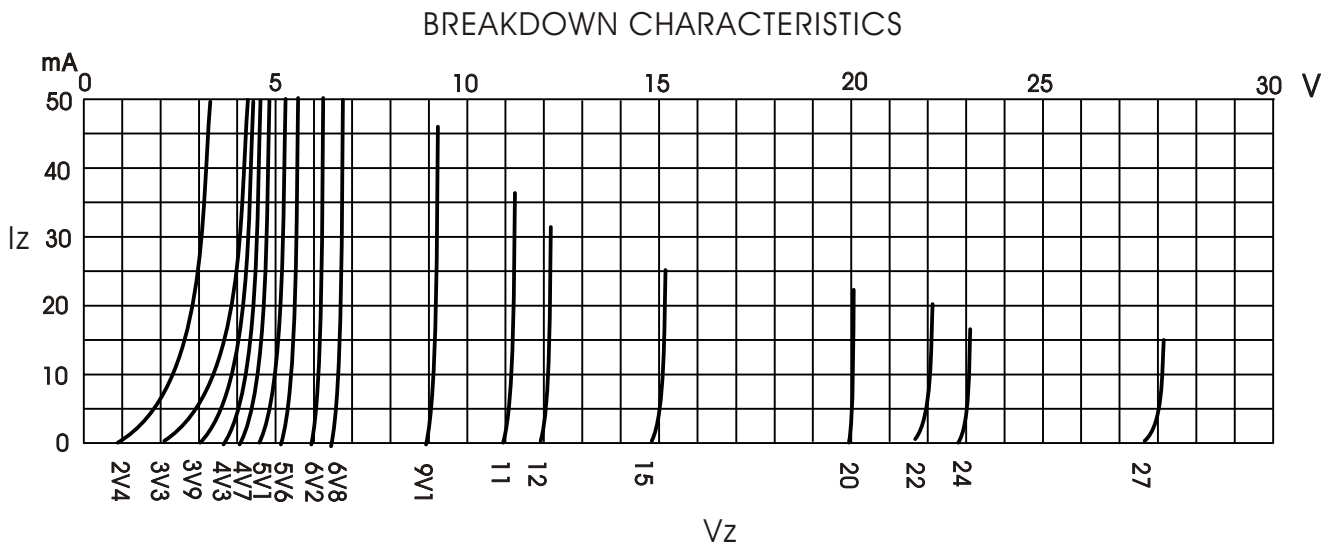
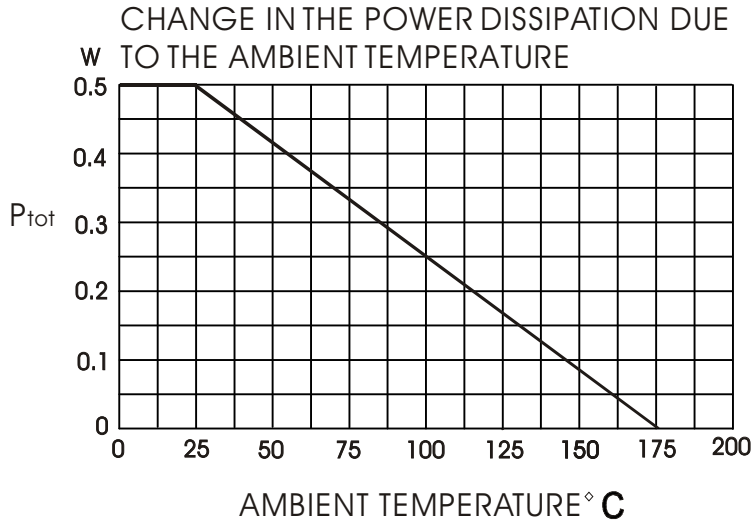
Single phase, half sine wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20 %.

Characteristic	Symbol	Value	Units
Power Dissipation at Tamb=25 °C	P <sub>tot</sub>	0.5 <sup>1)</sup>	W
Z-current	I <sub>Z</sub>	P <sub>V</sub> /V <sub>Z</sub>	mA
Thermal Resistance Junction to Ambient Air	R <sub>thJ-A</sub>	0.3 <sup>1)</sup>	K/mW
Maximum instantaneous forward voltage drop IF=10 mADC IF=200 mADC	V <sub>F</sub>	0.9 1.5	Volts
Junction temperature	T <sub>J</sub>	175	°C
Storage temperature range	T <sub>stg</sub>	-55 to +175	°C

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

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Device Type	Nominal Zener Voltage Vz at IzT	Test Current IzT	Maximum Zener Impedance			Maximum Reverse Leakage Current		Typical Temperature coefficient	Maximum Regulator Current IzM
			ZzT at IzT	ZzK at IzK	IzK	IR	Test Voltage Suffix B		
	Volts	mA	$\Omega$	$\Omega$	mA	$\mu$ A	Volts	%/°C	mA
ZMM55C2V4	2.28-2.56	5	85	600	1.0	50	1.0	-0.070	150
ZMM55C2V7	2.5-2.9	5	85	600	1.0	10	1.0	-0.070	135
ZMM55C3V0	2.8-3.2	5	85	600	1.0	4	1.0	-0.070	125
ZMM55C3V3	3.1-3.5	5	85	600	1.0	2	1.0	-0.065	115
ZMM55C3V6	3.4-3.8	5	85	600	1.0	2	1.0	-0.060	105
ZMM55C3V9	3.7-4.1	5	85	600	1.0	2	1.0	-0.050	95
ZMM55C4V3	4.0-4.6	5	75	600	1.0	1	1.0	-0.025	90
ZMM55C4V7	4.4-5.0	5	60	600	1.0	0.5	1.0	-0.010	85
ZMM55C5V1	4.8-5.4	5	35	550	1.0	0.1	1.0	-0.015	80
ZMM55C5V6	5.2-6.0	5	25	450	1.0	0.1	1.0	-0.025	70
ZMM55C6V2	5.8-6.6	5	10	200	1.0	0.1	2.0	+0.035	64
ZMM55C6V8	6.4-7.2	5	8	150	1.0	0.1	3.0	+0.045	58
ZMM55C7V5	7.0-7.9	5	7	50	1.0	0.1	5.0	+0.050	53
ZMM55C8V2	7.7-8.7	5	7	50	1.0	0.1	6.0	+0.050	47
ZMM55C9V1	8.5-9.6	5	10	50	1.0	0.1	7.0	+0.060	43
ZMM55C10	9.4-10.6	5	15	70	1.0	0.1	7.5	+0.070	40
ZMM55C11	10.4-11.6	5	20	70	1.0	0.1	8.5	+0.070	36
ZMM55C12	11.4-12.7	5	20	90	1.0	0.1	9.0	+0.070	32
ZMM55C13	12.4-14.1	5	26	110	1.0	0.1	10	+0.070	29
ZMM55C15	13.8-15.6	5	30	110	1.0	0.1	11	+0.070	27
ZMM55C16	15.3-17.1	5	40	170	1.0	0.1	12	+0.070	24
ZMM55C18	16.8-19.1	5	50	170	1.0	0.1	14	+0.070	21
ZMM55C20	18.8-21.2	5	55	220	1.0	0.1	15	+0.070	20
ZMM55C22	20.8-23.3	5	55	220	1.0	0.1	17	+0.070	18
ZMM55C24	22.8-25.6	5	80	220	1.0	0.1	18	+0.080	16
ZMM55C27	25.1-28.9	5	80	220	1.0	0.1	20	+0.080	14
ZMM55C30	28-32	5	80	220	1.0	0.1	22	+0.080	13
ZMM55C33	31-35	5	80	220	1.0	0.1	24	+0.080	12
ZMM55C36	34-38	5	80	220	1.0	0.1	27	+0.080	11
ZMM55C39	37-41	2.5	90	500	1.0	0.1	30	+0.080	10
ZMM55C43	40-46	2.5	90	600	1.0	0.1	33	+0.080	9.2
ZMM55C47	44-50	2.5	110	700	1.0	0.1	36	+0.080	8.5

1) STANDARD VOLTAGE TOLERANCE IS  $\pm 5\%$  AND  
 SUFFIX "ZMM55A" FOR  $\pm 1\%$   
 SUFFIX "ZMM55B"X FOR  $\pm 2\%$   
 SUFFIX "ZMM55C" FOR  $\pm 5\%$   
 SUFFIX "ZMM55D" FOR  $\pm 20\%$

1. STANDARDS 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  
 4. MEASURED WITH PULSES Tp=20mSec.