

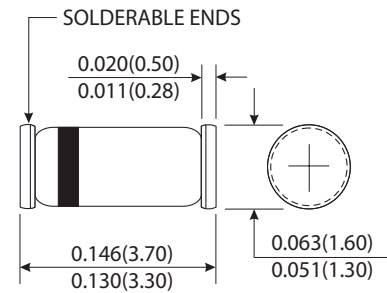
## ZMM55C-2V4 THRU ZMM55C-47

0.5W SILICON PLANAR  
ZENER DIODES

### Features

- Standards Zener voltage tolerance is  $\pm 20\%$ . Add suffix "A" for  $\pm 10\%$  tolerance and suffix "B" for  $\pm 5\%$  tolerance other tolerance, non standards and higher zener voltage upon request.
- These diode are also available in DO-35 case with type designation 1N5221 thru 1N5261

### MELF (DO-35)



Dimensions in inches and (millimeters)

### Mechanical Data

- Case : MELF(DO-35) glass case
- Weight : Approx. 0.05 gram

### Absolute Maximum Ratings (Limiting Values) (TA=25°C)

	Symbols	Value	Units
Zener current see table "Characteristics"			
Power dissipation at Tamb=25°C	Ptot	500 <sup>1)</sup>	mW
Junction Temperature	TJ	175	°C
Storage Temperature range	TSTG	-55 to +175	°C
1) Valid provided that electrodes are kept at ambient temperature			

### Electrical Characteristics (TA=25°C)

	Symbols	Min.	Typ.	Max.	Units
Thermal resistance junction to ambient	Rθ JA			300 <sup>1)</sup>	°C/W
Forward voltage at If=100mA	VF			1.0	V
1) Valid provided that electrodes are kept at ambient temperature					



## ZMM55C-2V4...ZMM55C-47 SILICON PLANAR ZENER DIODES

Type	Nominal Zener Voltage V <sub>Z</sub> at I <sub>ZT</sub> <sup>4)</sup>	Test Current I <sub>ZT</sub>	Maximum zener impedance <sup>1)</sup>		Typical Temperature Coefficient	Maximum Reverse Leakage Current		Maximum Regulator Current <sup>2)</sup> I <sub>ZM</sub>
			Z <sub>ZT</sub> at I <sub>ZT</sub>	Z <sub>ZK</sub> at I <sub>ZK</sub> =1mA		I <sub>R</sub>	Test-Voltage suffix B	
	Volts	mA	Ω	Ω	%/°C	μ A	Volts	mA
ZMM55C-2V4	2.28-2.56	5	85	600	-0.070	50	1.0	150
ZMM55C-2V7	2.5-2.9	5	85	600	-0.070	10	1.0	135
ZMM55C-3V0	2.8-3.2	5	85	600	-0.070	4	1.0	125
ZMM55C-3V3	3.1-3.5	5	85	600	-0.065	2	1.0	115
ZMM55C-3V6	3.4-3.8	5	85	600	-0.060	2	1.0	105
ZMM55C-3V9	3.7-4.1	5	85	600	-0.050	2	1.0	95
ZMM55C-4V3	4.0-4.6	5	75	600	-0.025	1	1.0	90
ZMM55C-4V7	4.4-5.0	5	60	600	-0.010	0.5	1.0	85
ZMM55C-5V1	4.8-5.4	5	35	550	+0.015	0.1	1.0	80
ZMM55C-5V6	5.2-6.0	5	25	450	+0.025	0.1	1.0	70
ZMM55C-6V2	5.8-6.6	5	10	200	+0.035	0.1	2.0	64
ZMM55C-6V8	6.4-7.2	5	8	150	+0.045	0.1	3.0	58
ZMM55C-7V5	7.0-7.9	5	7	50	+0.050	0.1	5.0	53
ZMM55C-8V2	7.7-8.7	5	7	50	+0.050	0.1	6.0	47
ZMM55C-9V1	8.5-9.6	5	10	50	+0.060	0.1	7.0	43
ZMM55C-10	9.4-10.6	5	15	70	+0.070	0.1	7.5	40
ZMM55C-11	10.4-11.6	5	20	70	+0.070	0.1	8.5	36
ZMM55C-12	11.4-12.7	5	20	90	+0.070	0.1	9.0	32
ZMM55C-13	12.4-14.1	5	26	110	+0.070	0.1	10	29
ZMM55C-15	13.8-15.6	5	30	110	+0.070	0.1	11	27
ZMM55C-16	15.3-17.1	5	40	170	+0.070	0.1	12	24
ZMM55C-18	16.8-19.1	5	50	170	+0.070	0.1	14	21
ZMM55C-20	18.8-21.2	5	55	220	+0.070	0.1	15	20
ZMM55C-22	20.8-23.3	5	55	220	+0.070	0.1	17	18
ZMM55C-24	22.8-25.6	5	80	220	+0.080	0.1	18	16
ZMM55C-27	25.1-28.9	5	80	220	+0.080	0.1	20	14
ZMM55C-30	28.0-32.0	5	80	220	+0.080	0.1	22	13
ZMM55C-33	31.0-35.0	5	80	220	+0.080	0.1	24	12
ZMM55C-36	34.0-38.0	5	80	220	+0.080	0.1	27	11
ZMM55C-39	37.0-41.0	2.5	90	500	+0.080	0.1	30	10
ZMM55C-43	40.0-46.0	2.5	90	600	+0.080	0.1	33	9.2
ZMM55C-47	44.0-50.0	2.5	110	700	+0.080	0.1	36	8.5

1) Standard ZENER DIODE 500mW V<sub>Z</sub> tolerance = ± 5%

2) ZMM = ZENER Mini Melf

3) V<sub>Z</sub> of ZENER DIODE, V code is instead of decimal point. (e.g., 3V6 = 3.6V)

4) Measured with pulses T<sub>p</sub> = 20ms



## ZMM55C-2V4 THRU ZMM55C-47 SILICON PLANAR ZENER DIODES

Admissible power dissipation versus ambient temperature  
(Valid provided that electrodes are kept at ambient temperature)

