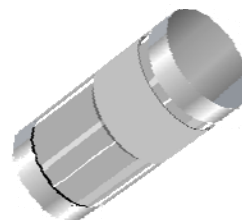


500mW Surface Mount Zener Diodes

Features

- Planar Die Construction
- 500mW Power Dissipation
- Very Sharp Reverse Characteristic
- Very High Stability
- Low Reverse Current Level
- Standard Zener Voltage Tolerance is $\pm 5\%$
- Ideally Suited for Automated Assembly Processes
- RoHS Compliant



MiniMelf



Mechanical Data

Case:	Molded Glass MiniMelf
Terminals:	Solderable per MIL-STD-750, Method 2026
Polarity:	Color band denotes cathode end
Weight:	Approx. 0.03 grams

Maximum Ratings & Electrical Characteristics ($T_{Ambient}=25^{\circ}\text{C}$ unless noted otherwise)

Symbol	Description	Value	Unit	Conditions
P_D	Power Dissipation at $T_a=25^{\circ}\text{C}$	500	mW	
V_F	Forward Voltage	1.5	V	$I_F=200\text{mA}$
R_{thJA}	Thermal Resistance Junction to Ambient	0.3	K/mW	
T_J	Junction Temperature	175	$^{\circ}\text{C}$	
T_{STG}	Storage Temperature Range	-65 to +175	$^{\circ}\text{C}$	

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

500mW Surface Mount Zener Diodes

TZMC2V4 - TZMC100

P/N	Marking Code	Normal Zener Voltage				Max. Zener impedance			Max. reverse leakage current	
		VZ @ IZT				ZZT @ IZT	Zzk @ Izk		ID @ VR	
		Nom.(V)	Min. (V)	Max. (V)	IZT (mA)	Ω	Ω	mA	μA	VR (V)
TZMC2V4	C2V4	2.4	2.28	2.56	5.0	85	600	1	50	1
TZMC2V7	C2V7	2.7	2.5	2.9	5.0	85	600	1	10	1
TZMC3V0	C3V0	3.0	2.8	3.2	5.0	90	600	1	4	1
TZMC3V3	C3V3	3.3	3.1	3.5	5.0	90	600	1	2	1
TZMC3V6	C3V6	3.6	3.4	3.8	5.0	90	600	1	2	1
TZMC3V9	C3V9	3.9	3.7	4.1	5.0	90	600	1	2	1
TZMC4V3	C4V3	4.3	4.0	4.6	5.0	90	600	1	1	1
TZMC4V7	C4V7	4.7	4.4	5.0	5.0	80	600	1	0.5	1
TZMC5V1	C5V1	5.1	4.8	5.4	5.0	60	550	1	0.1	1
TZMC5V6	C5V6	5.6	5.2	6.0	5.0	40	450	1	0.1	1
TZMC6V2	C6V2	6.2	5.8	6.6	5.0	10	200	1	0.1	2
TZMC6V8	C6V8	6.8	6.4	7.2	5.0	8	150	1	0.1	3
TZMC7V5	C7V5	7.5	7.0	7.9	5.0	7	50	1	0.1	5
TZMC8V2	C8V2	8.2	7.7	8.7	5.0	7	50	1	0.1	6
TZMC9V1	C9V1	9.1	8.5	9.6	5.0	10	50	1	0.1	7
TZMC10	C10V	10	9.4	10.6	5.0	15	70	1	0.1	7.5
TZMC11	C11V	11	10.4	11.6	5.0	20	70	1	0.1	8.5
TZMC12	C12V	12	11.4	12.7	5.0	20	90	1	0.1	9
TZMC13	C13V	13	12.4	14.1	5.0	26	110	1	0.1	10
TZMC15	C15V	15	13.8	15.6	5.0	30	110	1	0.1	11
TZMC16	C16V	16	15.3	17.1	5.0	40	170	1	0.1	12
TZMC18	C18V	18	16.8	19.1	5.0	50	170	1	0.1	14
TZMC20	C20V	20	18.8	21.2	5.0	55	220	1	0.1	15
TZMC22	C22V	22	20.8	23.3	5.0	55	220	1	0.1	17
TZMC24	C24V	24	22.8	25.6	5.0	80	220	1	0.1	18
TZMC27	C27V	27	25.1	28.9	5.0	80	220	1	0.1	20
TZMC30	C30V	30	28	32	5.0	80	220	1	0.1	22
TZMC33	C33V	33	31	35	5.0	80	220	1	0.1	24
TZMC36	C36V	36	34	38	5.0	80	220	1	0.1	27
TZMC39	C39V	39	37	41	2.5	90	500	1	0.1	30
TZMC43	C43V	43	40	46	2.5	90	600	1	0.1	33

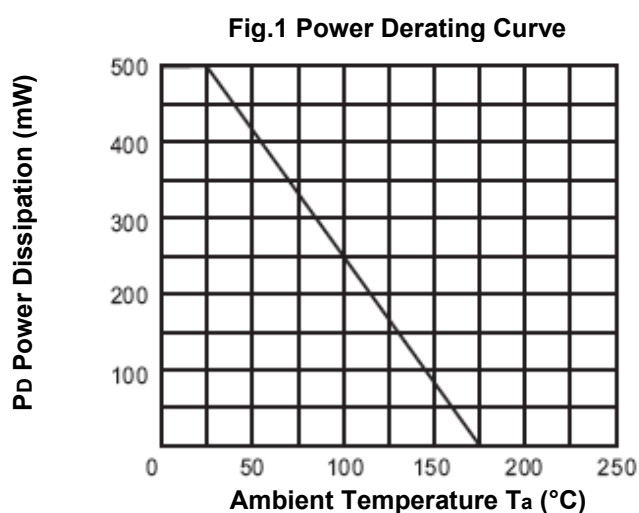
500mW Surface Mount Zener Diodes

TZMC2V4 - TZMC100

P/N	Marking Code	Normal Zener Voltage				Max. Zener impedance			Max. reverse leakage current	
		VZ @ IZT				ZZT @ IZT	Zzk @ Izk		ID @ VR	
		Nom.(V)	Min. (V)	Max. (V)	IZT (mA)	Ω	Ω	mA	μ A	VR (V)
TZMC47	C47V	47	44	50	2.5	110	700	1	0.1	36
TZMC51	C51V	51	48	54	2.5	125	700	0.5	0.1	39
TZMC56	C56V	56	52	60	2.5	135	1000	0.5	0.1	43
TZMC62	C62V	62	58	66	2.5	150	1000	0.5	0.1	47
TZMC68	C68V	68	64	72	2.5	200	1000	0.5	0.1	51
TZMC75	C75V	75	70	79	2.5	250	1500	0.5	0.1	56
TZMC82	C82V	82	77	87	2.5	300	2000	0.5	0.1	62
TZMC91	C91V	91	85	96	1.0	450	5000	0.1	0.1	68
TZMC100	C100	100	94	106	1.0	450	5000	0.1	0.1	75

Note: Marking code is available in 2008.

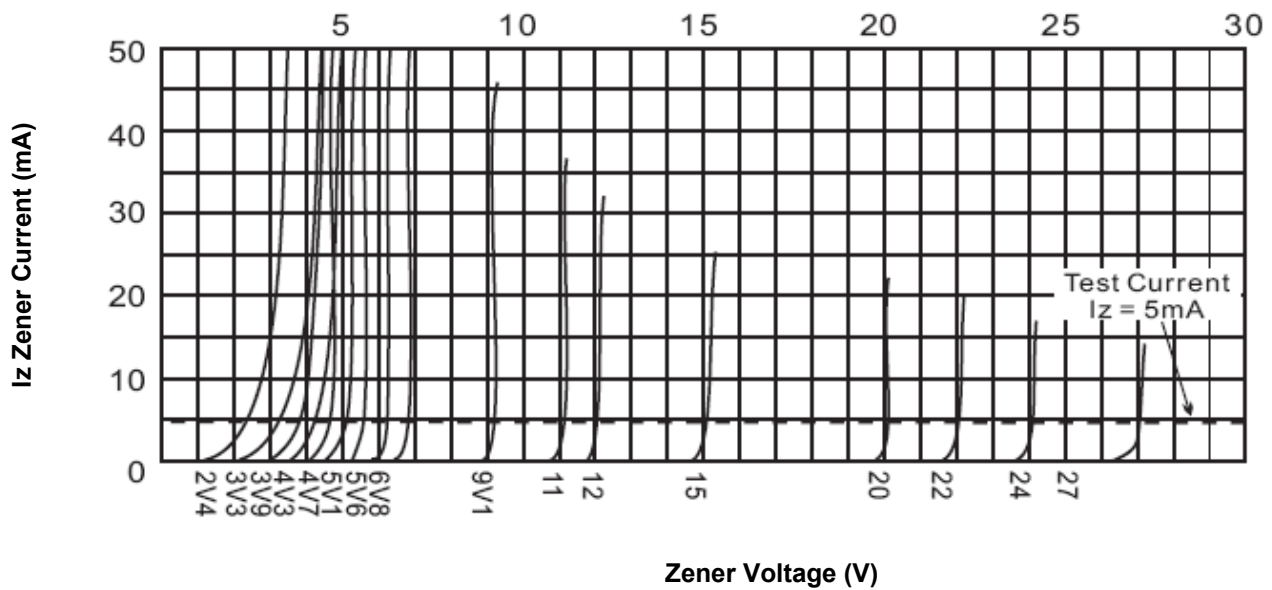
Characteristics Curves



500mW Surface Mount Zener Diodes

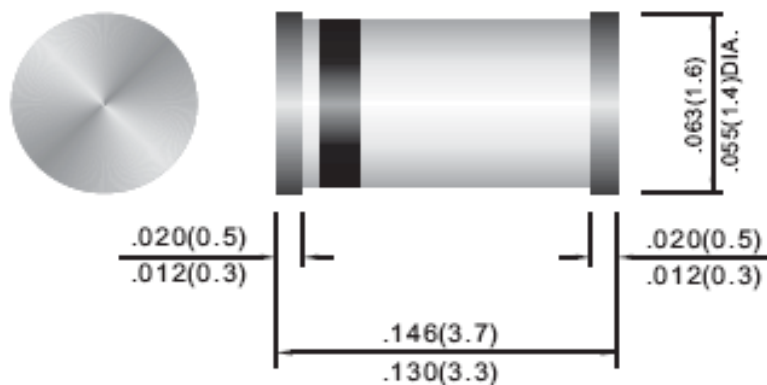
TZMC2V4 - TZMC100

Fig.2 Breakdown Characteristics



Dimensions in inches (mm)

MiniMelf



500mW Surface Mount Zener Diodes

TZMC2V4 - TZMC100

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