

# ZM-PTZ3.6B ~ ZM-PTZ36B

## SILICON EPITAXIAL PLANAR ZENER DIODES

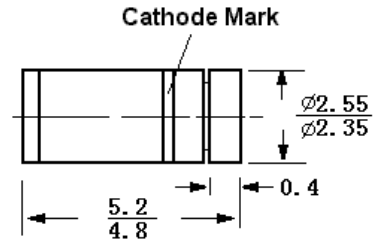
LL-41

### Features

- 1) Small surface mounting type
- 2) 1W of power can be obtained despite compact size
- 3) High surge withstand level

### Applications

- 1) Voltage regulation and voltage limiting
- 2) Voltage surge absorption



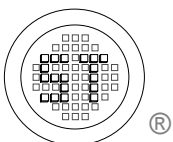
Glass case MELF

Weight approx. 0.25g  
Dimensions in mm

### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

	Symbol	Value	Unit
Power Dissipation <sup>1)</sup>	$P_{\text{tot}}$	1	W
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_s$	-55 to +150	$^\circ\text{C}$

1) Mounting density of other power components should be taken into consideration when laying out the pattern.



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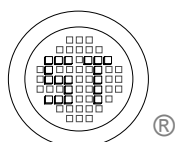


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## ZM-PTZ3.6B ~ ZM-PTZ36B

TYPE	Zener Voltage Range			Operating Resistance		Reverse current	
	V <sub>Z</sub> (V)		I <sub>Z</sub> (mA)	Z <sub>Z</sub> (Ω)		I <sub>R</sub> (uA)	V <sub>R</sub> (V)
	Min.	Max.		Max.	I <sub>Z</sub> (mA)		
ZM-PTZ3.6B	3.6	4	40	15	40	20	1
ZM-PTZ3.9B	3.9	4.4	40	15	40	20	1
ZM-PTZ4.3B	4.3	4.8	40	15	40	20	1
ZM-PTZ4.7B	4.7	5.2	40	10	40	20	1
ZM-PTZ5.1B	5.1	5.7	40	8	40	20	1
ZM-PTZ5.6B	5.6	6.3	40	8	40	20	1.5
ZM-PTZ6.2B	6.2	7	40	6	40	20	3
ZM-PTZ6.8B	6.8	7.7	40	6	40	20	3.5
ZM-PTZ7.5B	7.5	8.4	40	4	40	20	4
ZM-PTZ8.2B	8.2	9.3	40	4	40	20	5
ZM-PTZ9.1B	9.1	10.2	40	6	40	20	6
ZM-PTZ10B	10	11.2	40	6	40	10	7
ZM-PTZ11B	11	12.3	20	8	20	10	8
ZM-PTZ12B	12	13.5	20	8	20	10	9
ZM-PTZ13B	13.3	15	20	10	20	10	10
ZM-PTZ15B	14.7	16.5	20	10	20	10	11
ZM-PTZ16B	16.2	18.3	20	12	20	10	12
ZM-PTZ18B	18	20.3	20	12	20	10	13
ZM-PTZ20B	20	22.4	20	14	20	10	15
ZM-PTZ22B	22	24.5	10	14	10	10	17
ZM-PTZ24B	24	27.6	10	16	10	10	19
ZM-PTZ27B	27	30.8	10	16	10	10	21
ZM-PTZ30B	30	34	10	18	10	10	23
ZM-PTZ33B	33	37	10	18	10	10	25
ZM-PTZ36B	36	40	10	20	10	10	27

- 1) The Zener voltage is measured 40ms after power is supplied.
- 2) The operating resistances (Z<sub>Z</sub>, Z<sub>ZK</sub>) are measured by superimposing a minute alternating current on the regulated current (I<sub>Z</sub>).



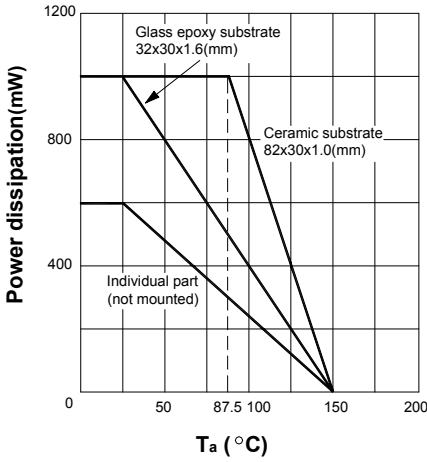
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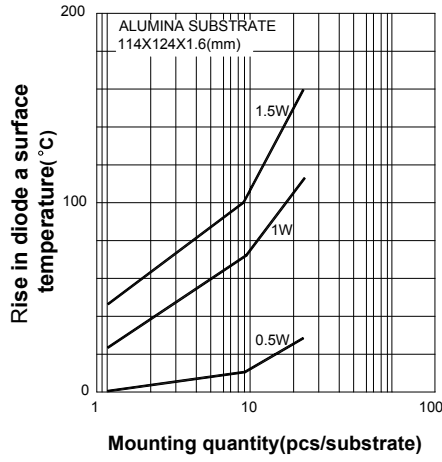
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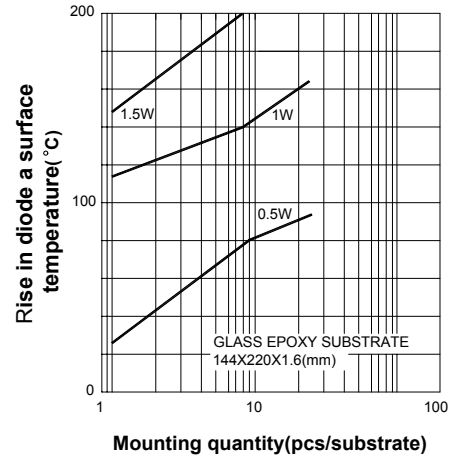
**Derating curve**



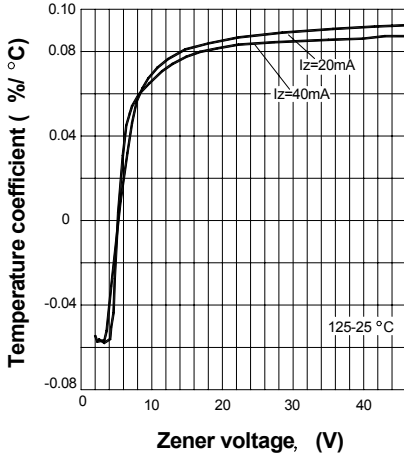
**Rise in surface temperature**



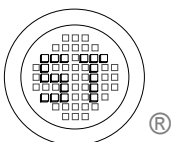
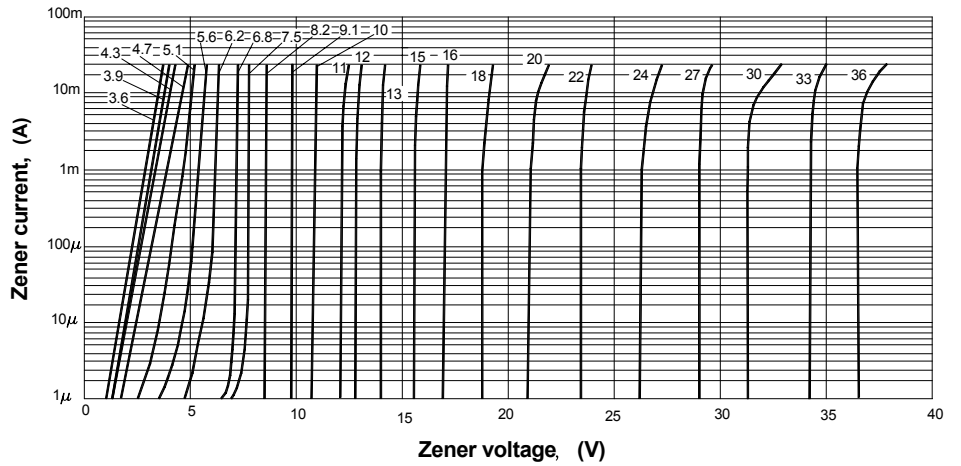
**Rise in surface temperature**



**Zener voltage - temp. coefficient characteristics**



**Zener voltage characteristics**



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