

# ZM-PTZ3V6B ~ ZM-PTZ36B

## SILICON EPITAXIAL PLANAR ZENER DIODES

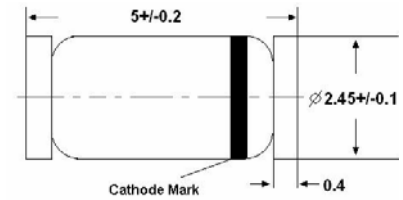
### Features

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

### Applications

- Voltage regulation and voltage limiting
- Voltage surge absorption

LL-41



Glass case MELF  
Dimensions in mm

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

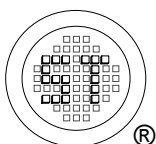
Parameter	Symbol	Value	Unit
Power Dissipation <sup>1)</sup>	$P_{\text{tot}}$	1	W
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_s$	- 55 to + 150	$^\circ\text{C}$

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

Type	Zener Voltage Range $V_z$ (V)			Operating Resistance $Z_z$ ( $\Omega$ )		Reverse current $I_R$ ( $\mu\text{A}$ )	
	Min.	Max.	$I_z$ (mA)	Max.	$I_z$ (mA)	Max.	$V_R$ (V)
ZM-PTZ3V6B	3.6	4	40	15	40	20	1
ZM-PTZ3V9B	3.9	4.4	40	15	40	20	1
ZM-PTZ4V3B	4.3	4.8	40	15	40	20	1
ZM-PTZ4V7B	4.7	5.2	40	10	40	20	1
ZM-PTZ5V1B	5.1	5.7	40	8	40	20	1
ZM-PTZ5V6B	5.6	6.3	40	8	40	20	1.5
ZM-PTZ6V2B	6.2	7	40	6	40	20	3
ZM-PTZ6V8B	6.8	7.7	40	6	40	20	3.5
ZM-PTZ7V5B	7.5	8.4	40	4	40	20	4
ZM-PTZ8V2B	8.2	9.3	40	4	40	20	5
ZM-PTZ9V1B	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

<sup>1)</sup> Tested with pulses  $t_p = 20\text{ ms}$ .

<sup>2)</sup> The operating resistances ( $Z_z$ ,  $Z_{zK}$ ) are measured by superimposing a minute alternating current on the regulated current ( $I_z$ ).



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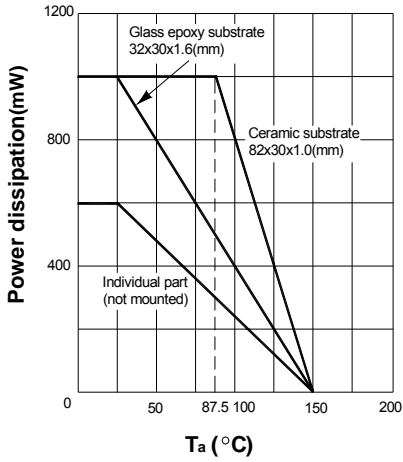


ISO/TS 16949 : 2002 Certificate No. 05103  
ISO 14001:2004 Certificate No. 7116  
ISO 9001:2000 Certificate No. 0506098

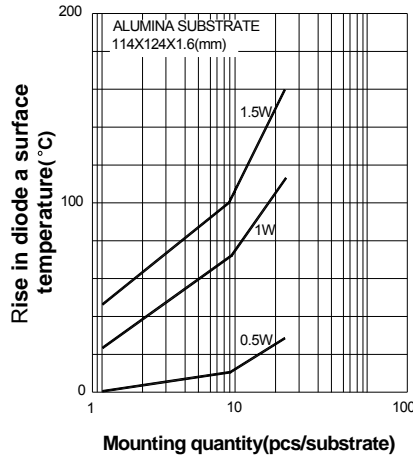
Dated : 07/05/2006

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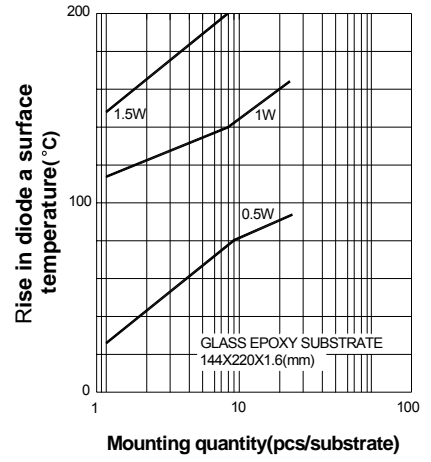
Derating curve



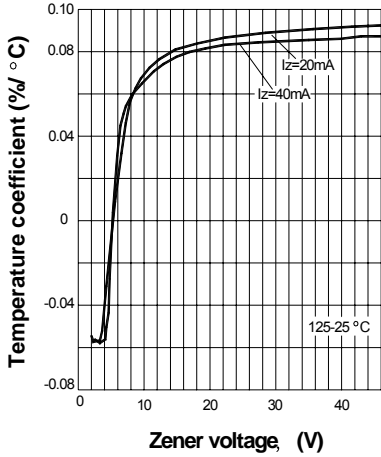
Rise in surface temperature



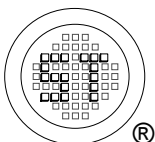
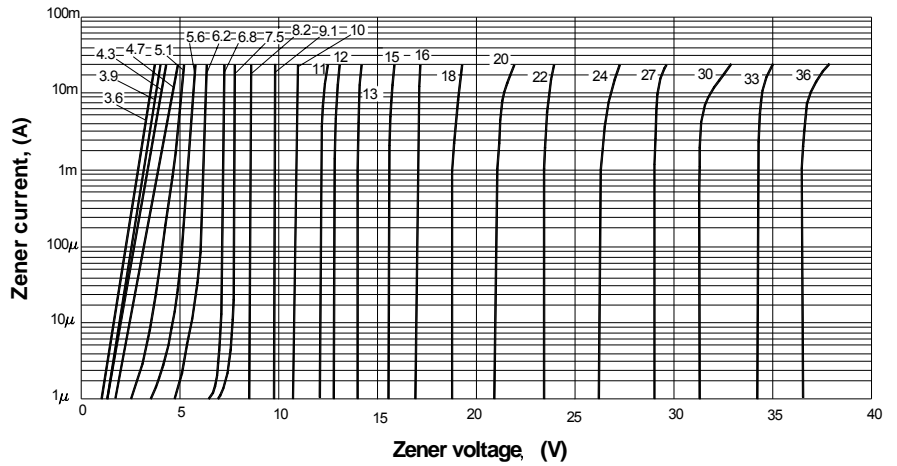
Rise in surface temperature



Zener voltage - temp. coefficient characteristics



Zener voltage characteristics



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