

ZM-PTZ3V6B ~ ZM-PTZ36B

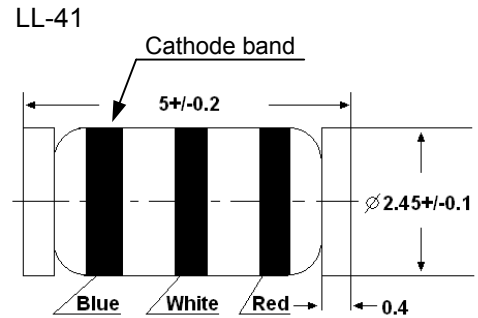
SILICON EPITAXIAL PLANAR ZENER DIODES

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



Glass case MELF

Dimensions in mm

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

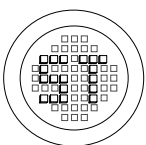
Parameter	Symbol	Value	Unit
Power Dissipation ¹⁾	P_{tot}	1	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_s	- 55 to + 150	$^\circ\text{C}$

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

Type	Zener Voltage Range V_z (V)			Operating Resistance Z_z (Ω)		Reverse current I_R (μA)	
	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

¹⁾ Tested with pulses $t_p = 20$ ms.

²⁾ 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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SEMTECH ELECTRONICS LTD.

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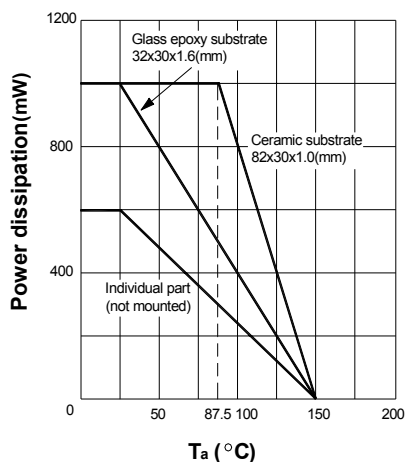


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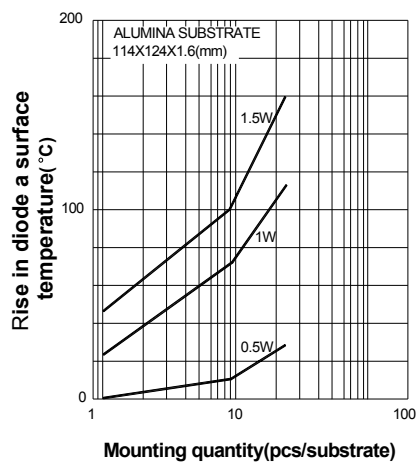
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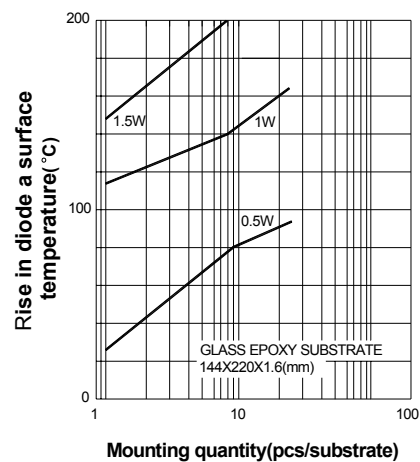
Derating curve



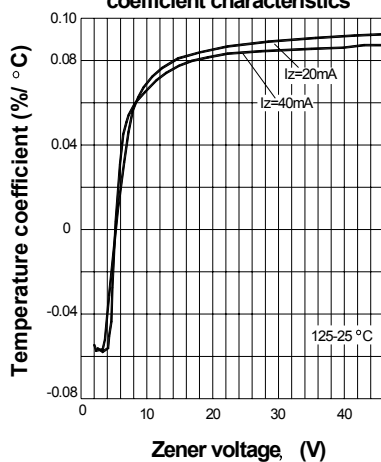
Rise in surface temperature



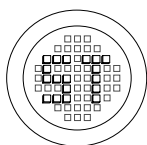
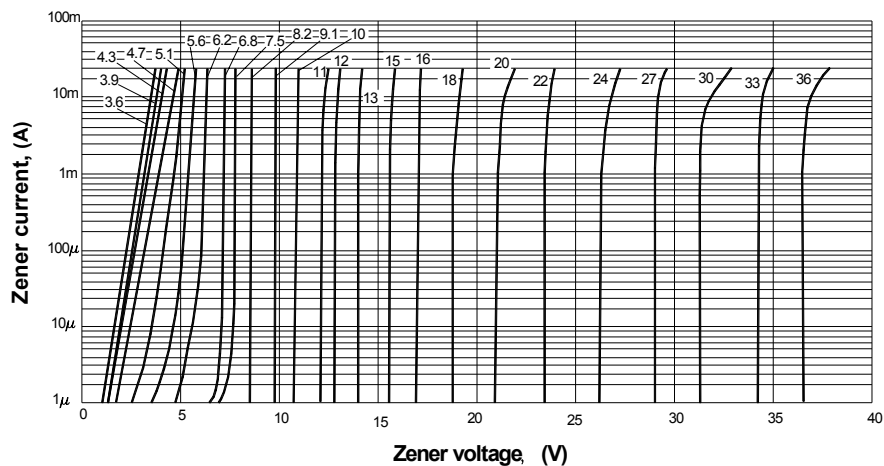
Rise in surface temperature



Zener voltage - temp. coefficient characteristics



Zener voltage characteristics



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