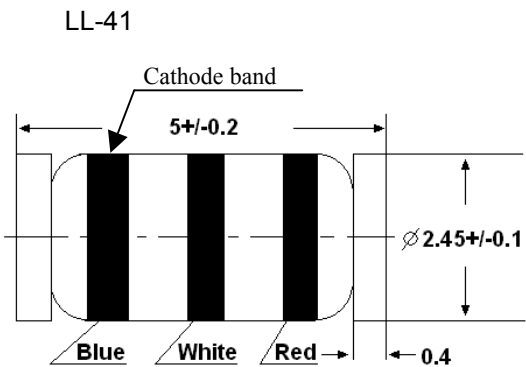


ZMU 100...ZMU 180(1W)

SILICON PLANAR POWER ZENER DIODES

for use in stabilizing and clipping circuits with high power rating. The Zener voltages are graded according to the international E 12 standard. Smaller voltage tolerances are upon request.

These diodes are delivered taped.
Details see “Taping”.



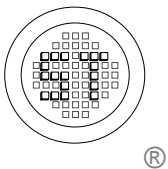
Glass case MELF
Dimensions in mm

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

	Symbol	Value	Unit
Zener Current see R table “Characteristics”			
Power Dissipation	P_{tot}	1 ¹⁾	W
Junction Temperature	T_j	175	$^{\circ}\text{C}$
Storage Temperature Range	T_s	-55 to +175	$^{\circ}\text{C}$
¹⁾ Valid provided that electrodes are kept at ambient temperature.			

Characteristics at $T_{\text{amb}} = 25^{\circ}\text{C}$

	Symbol	Min.	Typ.	Max.	Unit
Thermal Resistance Junction to Ambient Air	R_{thA}	-	-	170 ¹⁾	K/W
¹⁾ Valid provided that electrodes are kept at ambient temperature.					



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Dated : 10/05/2005

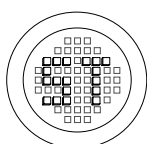
ZMU 100...ZMU 180(1W)

Characteristics at $T_a = 25^\circ\text{C}$

TYPE	Zener voltage ³⁾ at I_{ZT} V_Z V	Dynamic Resistance at $f = 1\text{kHz}$ $r_{zj}\Omega$	Temp. coeff. of Zener volt. at I_{ZT} $\propto V_Z 10^{-4}/\text{K}$	Test current $I_{ZT}\text{mA}$	Reverse voltage at $I_R = 0.5\mu\text{A}$ V_R V	Admissible Zener current ¹⁾ at $T_{\text{amb}} = 25^\circ\text{C}$ $I_Z\text{mA}$
ZMU100	88...110	140(<300)	+9...+13	5	>75	7
ZMU120	107...134	170(<330)	+9...+13	5	>90	6
ZMU150	130...165	200(<360)	+9...+13	5	>112	5
ZMU180	160...200	220(<380)	+9...+13	5	>134	4

1) Valid provided that electrodes are kept at ambient temperature.

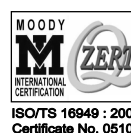
2) Tested with pulses $t_p = 20\text{ ms}$



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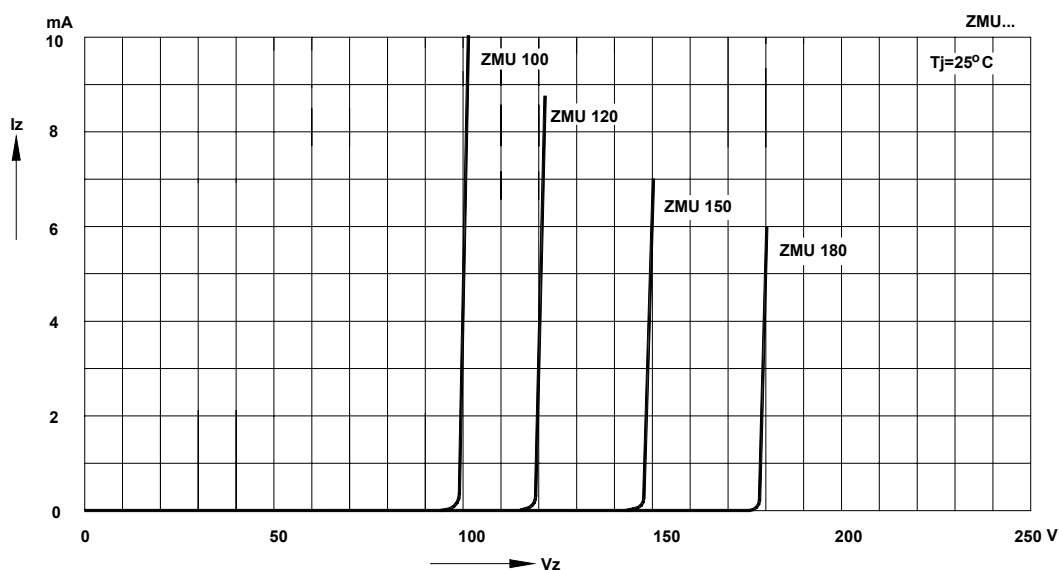
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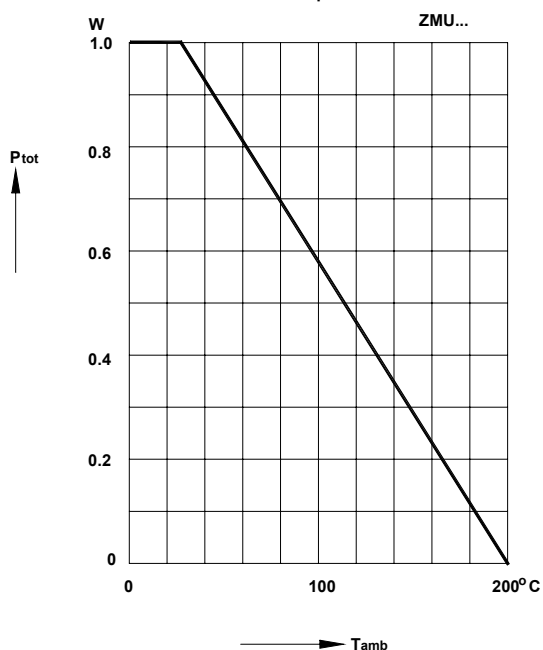
Dated : 10/05/2005

ZMU 100...ZMU 180(1W)

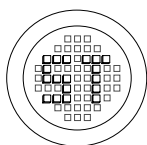
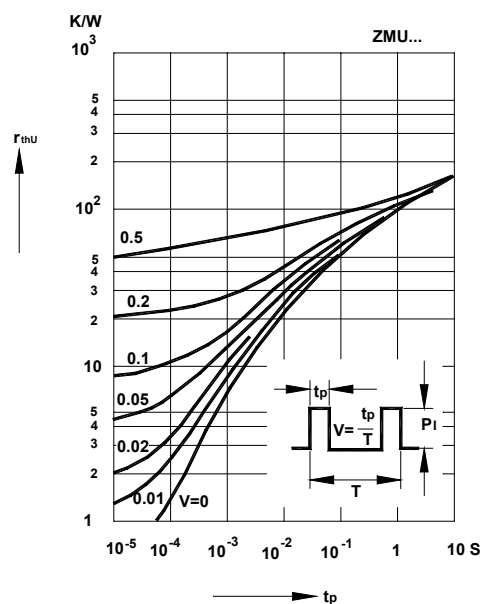
Breakdown characteristics
 $T_j = \text{constant (pulsed)}$



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

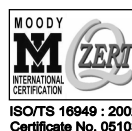


Pulse thermal resistance versus pulse duration
 Valid provided that electrodes are kept at ambient temperature.



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