

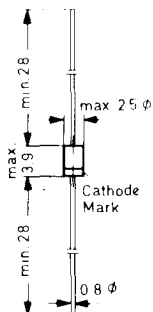
ZPU 100 ... ZPU 180 (1.3 W, 10%)

Silicon Planar Power Zener Diodes

for use in stabilizing and clipping circuits with higher power rating. The Zener voltage are graded according to the international E 12 standard (tolerance $\pm 10\%$). Smaller voltage tolerances on request.

Glass case JEDEC DO-41
54 B 2 according to DIN 41 880
Weight approx. 0.35 g
Dimensions in mm

These diodes are delivered taped.
Details see "Taping".



Maximum Ratings

Zener current see table on next page

Power dissipation @ $T_{amb} = 25^\circ\text{C}$	P_{tot}	1.3 1)	W
Junction temperature	T_j	200	$^\circ\text{C}$
Storage temperature range	T_S	-55...+200	$^\circ\text{C}$

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

Thermal resistance junction to ambient air	R_{thA}	< 130 1)	$^\circ\text{C}/\text{W}$
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Type	Zener voltage 2) @ $I_{Z\text{ test}}$ V_Z V	Dynamic resistance @ $I_{Z\text{ test}}$ $f = 1\text{ kHz}$ r_{zj} Ω	Temp. coeff. of Zener volt. @ $I_{Z\text{ test}}$ α_{VZ} $10^{-4}/^\circ\text{C}$	Test current $I_{Z\text{ test}}$ mA	Reverse voltage @ $I_R = 0.5\ \mu\text{A}$ V_R V	Admissible Zener current 1) @ $T_{amb} = 45^\circ\text{C}$ I_Z mA
ZPU 100	88...110	140 (<300)	+9...+13	5	>75	10
ZPU 120	107...134	170 (<330)	+9...+13	5	>90	8.5
ZPU 150	130...165	200 (<360)	+9...+13	5	>112	7
ZPU 180	160...200	220 (<380)	+9...+13	5	>134	5.5

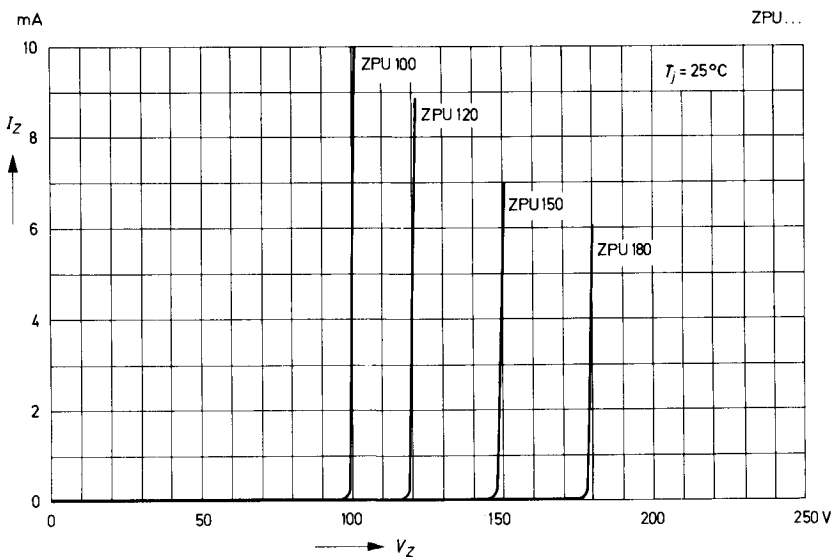
1) Valid provided that leads are kept at ambient temperature at a distance of 10 mm from case.

2) tested with pulses

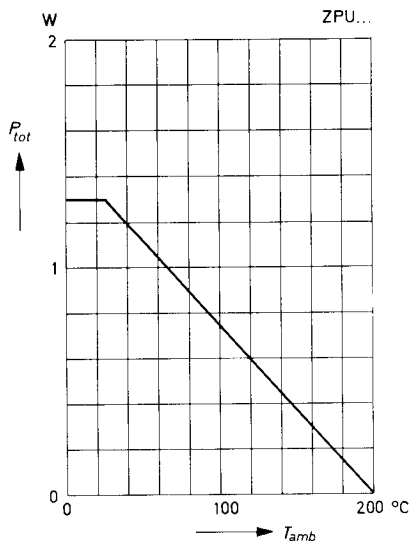
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Breakdown characteristics

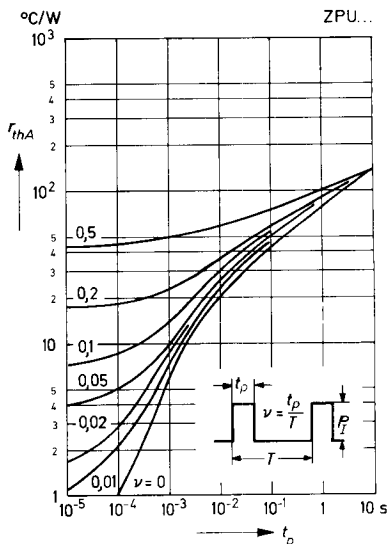
@ $T_j = \text{constant}$ (pulsed)



Admissible power dissipation versus ambient temperature (see note 1) on previous page)

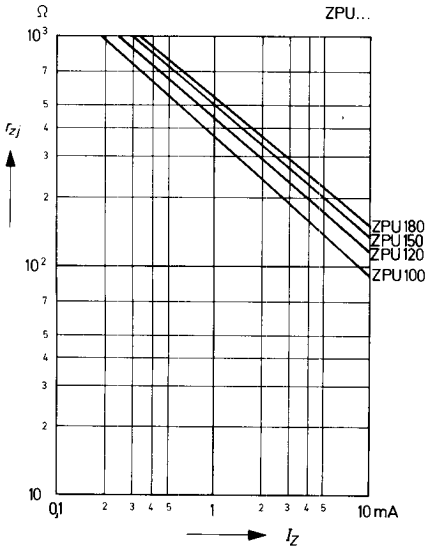


Pulse thermal resistance versus pulse duration (see note 1) on previous page)



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**Dynamic resistance
versus
Zener current**



**Thermal resistance
versus
lead length**

