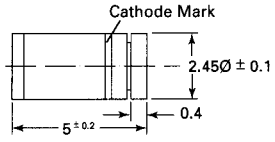
ZMU 100 ... ZMU 180 (1W)

Silicon Planar Power Zener Diodes
for use in stabilizing and clipping circuits with high power rating. The Zener voltage are graded according to the international E 12 standard. Smaller voltage tolerances on request.

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



Glass case MELF

Weight approx. 0.25g
Dimensions in mm

Absolute Maximum Ratings (T_a = 25°C)

	Symbol	Value	Unit
Zener Current see Table "Characteristics"			
Power Dissipation at T_{amb} = 25 °C	P_{tot}	1[1)]	W
Junction Temperature	T_j	+175	°C
Storage Temperature Range	T_s	-65 to + 175	°C
[1)] Valid provided that electrodes are kept at ambient temperature			

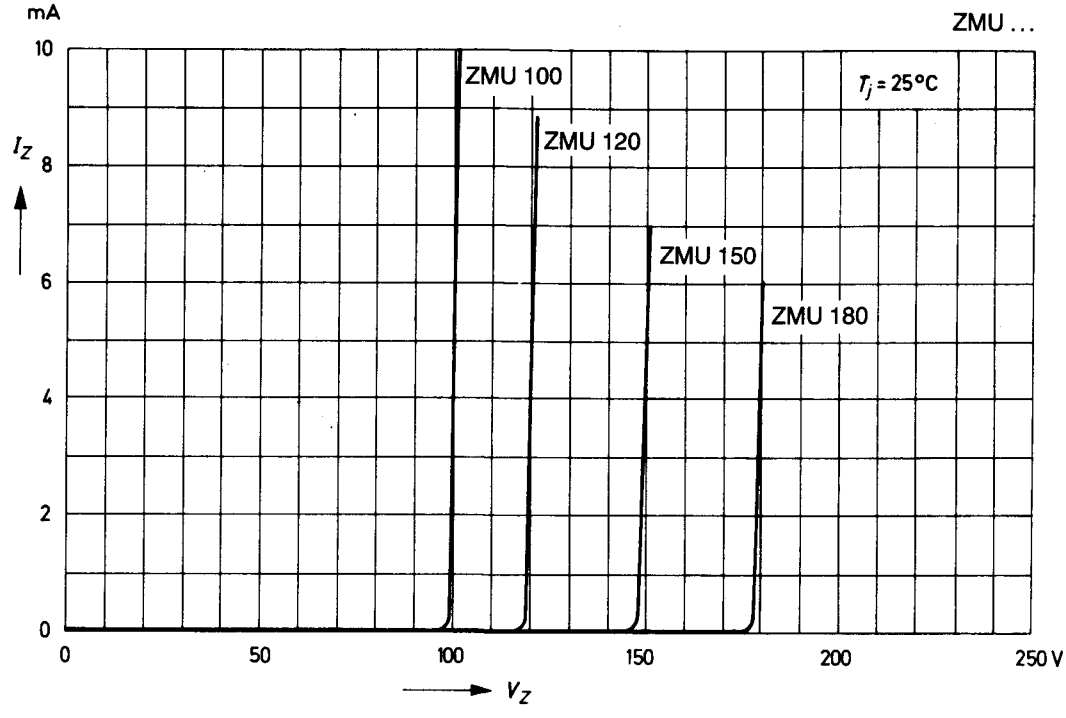
Characteristics at T_{amb} = 25 °C

	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					

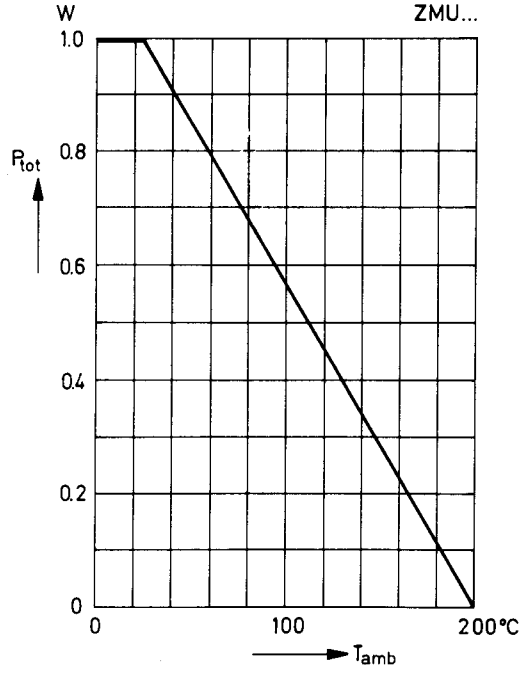
Type	Zener voltage [2)] at I_{ZT} V_Z V	Dynamic resistance at I_{ZT} f = 1 kHz r_{zj} Ω	Temp. coeff. of Zener volt. at I_{ZT} $\alpha_{VZ}10^{-4}$ /K	Test current I_{ZT} mA	Reverse voltage at I_R = 0.5 µA V_R V	Admissible Zener current [1)] at T_{amb} = 25 °C I_Z mA
ZMU100	88 ... 110	140 (<300)	+9 ... +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 tp = 20 ms.

Breakdown characteristics
T_j = 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