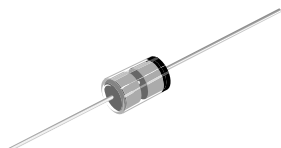


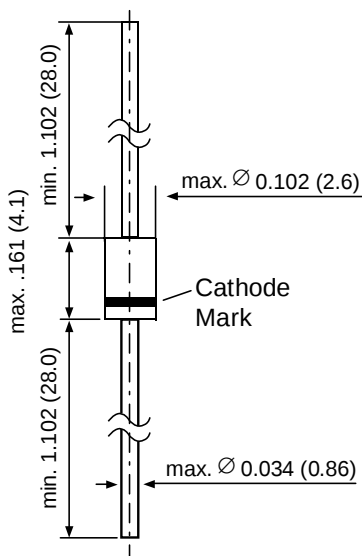
Zener Diodes

V_Z Range 100 to 180V

Power Dissipation 1.3W



DO-204AL (DO-41 Glass)



Dimensions in inches and (millimeters)

Features

- Silicon Planar Zener Diodes
- For use in stabilizing and clipping circuits with higher power rating.
- The Zener voltages are graded according to the international E 12 standard. Smaller voltage tolerances are available upon request.
- These diodes are also available in MELF case with the type designation ZMU100 ... ZMU180.

Mechanical Data

Case: DO-41 Glass Case

Weight: approx. 0.35g

Packaging Codes/Options:

D9/5K per 13" reel (52mm tape), 10K/box

E1/5K per Ammo mag. (52 mm tape), 10K/box

Maximum Ratings and Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Zener Current (see Table "Characteristics")			
Power Dissipation at T _{amb} = 25°C	P _{tot}	1.3 ⁽¹⁾	W
Thermal Resistance Junction to Ambient Air	R _{θJA}	130 ⁽¹⁾	°C/W
Junction Temperature	T _j	175	°C
Storage Temperature Range	T _s	-55 to +175	°C

Notes:

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

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Type	Zener Voltage ⁽²⁾ at I _{ZT} V _Z (V)		Dynamic Resistance at I _{ZT} f = 1kHz r _{Zj} (Ω)	Temp. Coeff. of Zener Voltage at I _{ZT} α _{VZ} (10 ⁻⁴ /°C)		Test current I _{ZT} (mA)	Reverse Voltage at I _R = 0.5μA V _R (V)	Admissible Zener current ⁽¹⁾ at T _{amb} = 25°C I _Z (mA)
	Min.	Max.		Min.	Max.			
ZPU100	88	110	140 (< 300)	+9	+13	5	> 75	10
ZPU120	107	134	170 (< 330)	+9	+13	5	> 90	8.5
ZPU150	130	165	200 (< 360)	+9	+13	5	> 112	7
ZPU180	160	200	220 (< 380)	+9	+13	5	> 134	5.5

Notes:

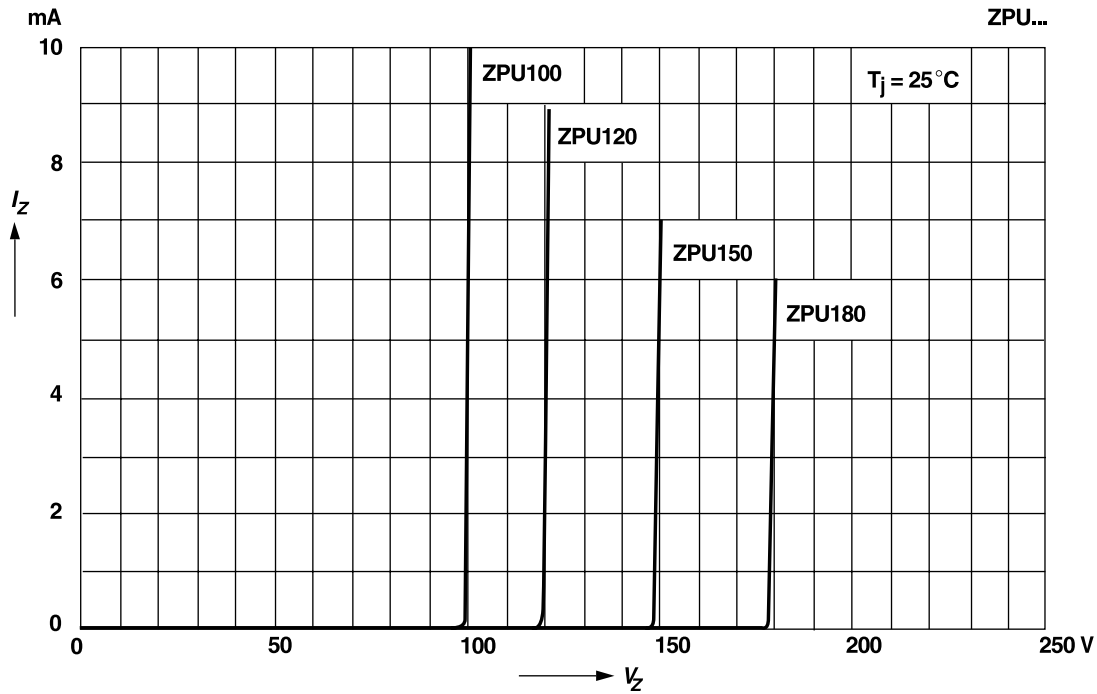
(1) Valid provided that leads are kept at ambient temperature at a distance of 10mm from case

(2) Tested with pulses t_p = 5ms

Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

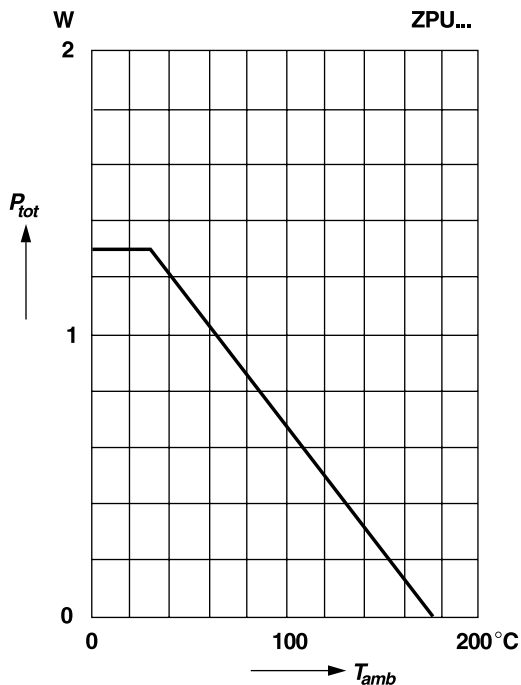
Breakdown characteristics

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



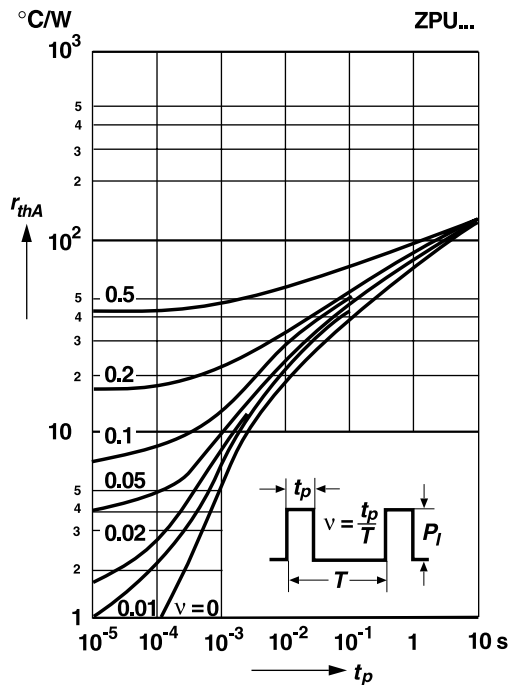
Admissible power dissipation versus ambient temperature

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



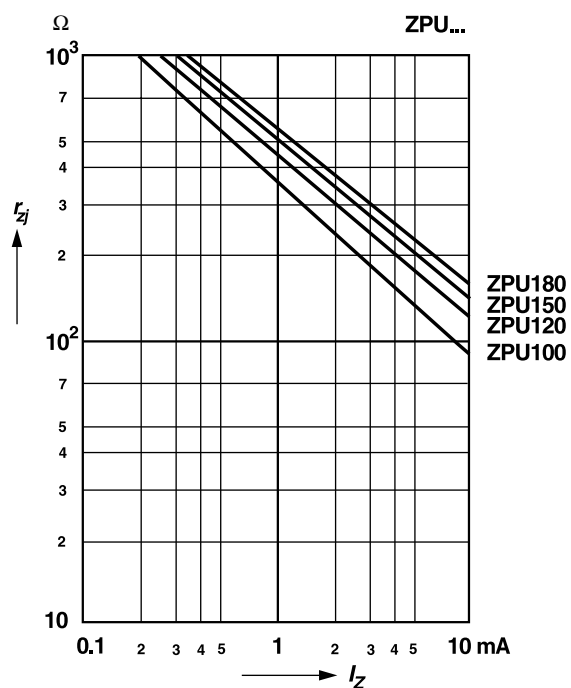
Pulse thermal resistance versus pulse duration

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



Ratings and Characteristic Curves (T_A = 25°C unless otherwise noted)

Dynamic resistance
versus Zener current



Thermal resistance
versus lead length

