

# ZPU100 - ZPU180

$V_Z$  : 100 to 180V

$P_D$  : 1.3W

## FEATURES :

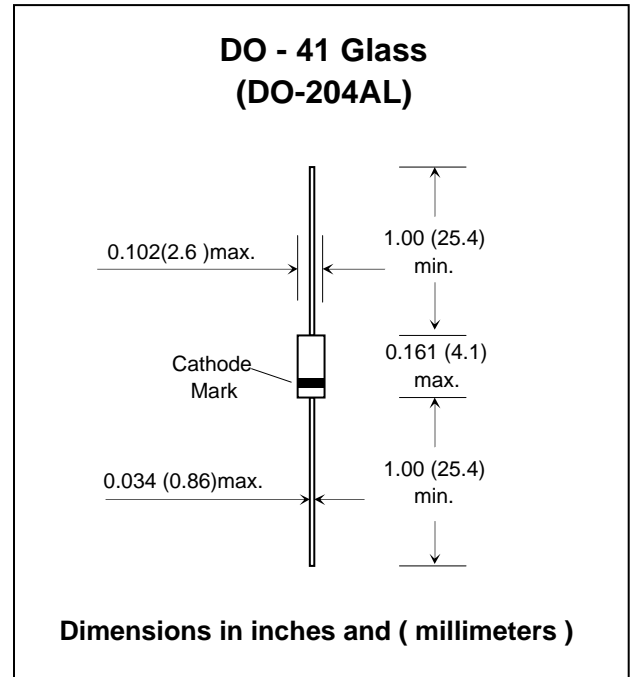
- Silicon planar zener diodes
- For use in stabilizing and clipping circuits with higher power rating.
- Other tolerances are available upon request.
- These diodes are also available in MELF case with the type designation ZMU100 ... ZMU180.
- **Pb / RoHS Free**

## MECHANICAL DATA :

**Case:** DO-41 Glass Case

**Weight:** approx. 0.35g

# ZENER DIODES



## Maximum Ratings and Thermal Characteristics (Rating at 25 °C ambient temperature unless otherwise specified)

Parameter	Symbol	Value	Unit
Zener Current see Table "Characteristics"			
Power Dissipation	$P_D$	1.3 <sup>(1)</sup>	W
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	130 <sup>(1)</sup>	°C/W
Junction temperature	$T_J$	175	°C
Storage temperature range	$T_S$	-55 to + 175	°C

**Note :** (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 <sup>(1)</sup> $V_Z @ I_{ZT}$		Test Current $I_{ZT}$ (mA)	Dynamic Resistance at $I_{ZT}$ , $f = 1\text{kHz}$ $r_{zj}$ ( $\Omega$ )	Reverse Voltage at $I_R = 0.5 \mu\text{A}$ $V_R$ (V)	Admissible Zener current <sup>(2)</sup> $I_Z$ (mA)	Temp. Coeff. of Zener Voltage at $I_{ZT}$ $\alpha_{VZ} (10^{-4}/^\circ\text{C})$	
	Min. (V)	Max. (V)					Min.	Max.
	ZPU100	88					110	5
ZPU120	107	134	5	170 (<330)	>90	8.5	+9	+13
ZPU150	130	165	5	200 (<360)	>112	7	+9	+13
ZPU180	160	200	5	220 (<380)	>134	5.5	+9	+13

### Notes :

(1) Tested with pulses  $t_p = 5 \text{ms}$

(2) Valid provided that electrodes are kept at ambient temperature