

# ZPU100 - ZPU180

# ZENER DIODES

$V_Z$  : 100 to 180V

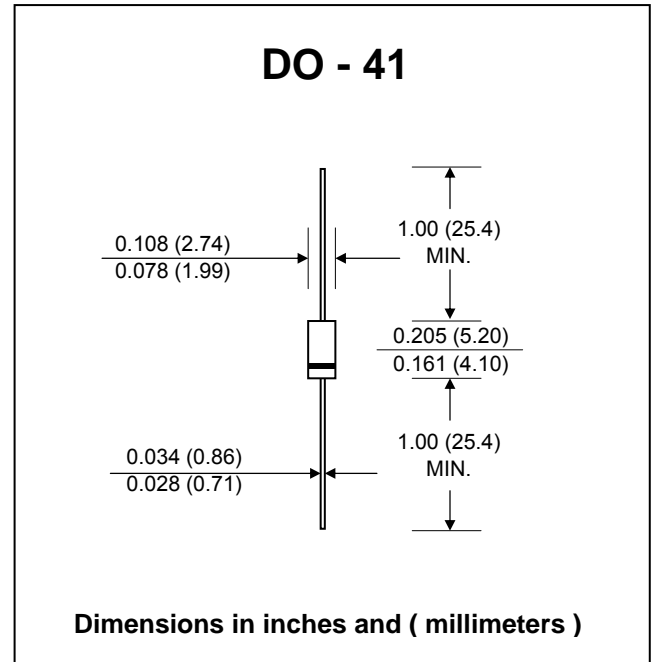
$P_D$  : 1.3W

### FEATURES :

- \* Glass passivated junction chip
- \* For use in stabilizing and clipping circuits with higher power rating.
- \* Other tolerances are available upon request.
- \* Pb / RoHS Free

### MECHANICAL DATA :

- \* Case : DO-41 Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.335 gram



### 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	$T_{STG}$	-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 No.	Zener Voltage <sup>(1)</sup> $V_Z @ I_{ZT}$		Test Current $I_{ZT}$	Dynamic Resistance at $I_{ZT}$ , $f = 1\text{kHz}$ $r_{zj}$	Reverse Voltage at $I_R = 0.5 \mu\text{A}$ $V_R$	Admissible Zener current <sup>(2)</sup> $I_Z$	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	140 (<300)	>75	10	+9	+13
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