

ZPU100 - ZPU180

ZENER DIODES

V_Z : 100 to 180V

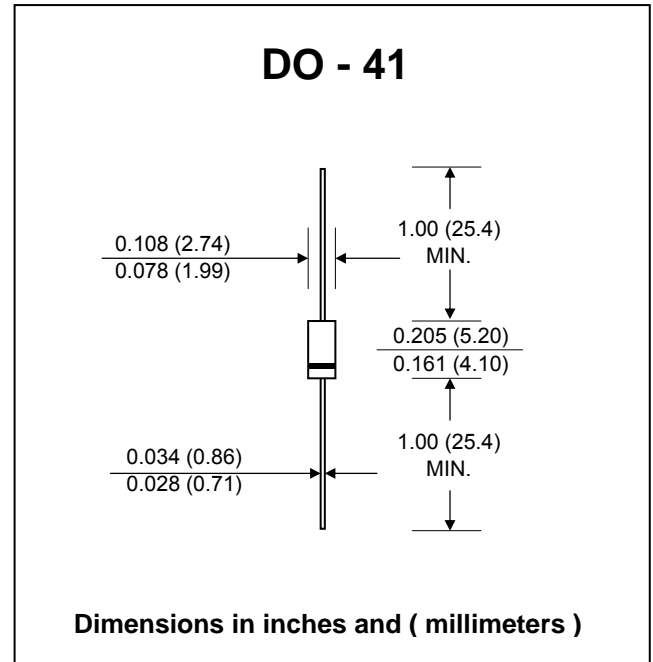
P_D : 1.3W

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 ⁽¹⁾	W
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	130 ⁽¹⁾	°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 ⁽¹⁾ $V_Z @ I_{ZT}$		Test Current I_{ZT} (mA)	Dynamic Resistance at I_{ZT} , $f = 1\text{kHz}$ r_{zj} (Ω)	Reverse Voltage at $I_R = 0.5 \mu\text{A}$ V_R (V)	Admissible Zener current ⁽²⁾ 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	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