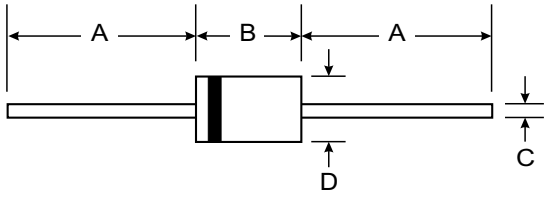
ZPU100 - ZPU180

SILICON POWER ZENER DIODE

Features

- Planar Die Construction
- 1.3W Power Dissipation
- Zener Voltages Available from 100V - 180V
- Hermetic Glass Package for High Reliability



Mechanical Data

- Case: DO-41, Glass
- Leads: Solderable per MIL-STD-202, Method 208
- Polarity: Color Band Denotes Cathode
- Weight: 0.3 grams (approx)
- Mounting Position: Any

DO-41		
Dim	**Min**	**Max**
A	25.4	—
B	4.1	5.2
C	0.71	0.86
D	2.0	2.7
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics

@ T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristics	Symbol	Value	Unit
Zener Current see Table below	—	—	—
Maximum Power Dissipation (Note 1)	P_d	1.3	W
Maximum Thermal Resistance Junction to Ambient Air (Note 1)	$R_{\theta JA}$	130	°C/W
Storage and Operating Temperature Range	T_j, T_{STG}	–55 to +200	°C

Electrical Characteristics

@ T_A= 25°C unless otherwise specified

Type	Zener Voltage Range (Note 2)	Test Current	Maximum Dynamic Impedance	Typ. Temperature Coefficient	Minimum Reverse Voltage	Maximum Zener Current (Note 1)
	V_Z @ I_{ZT}	I_{ZT}	Z_{ZT} @ I_{ZT}	@ I_{ZT}	V_R @ I_R = 0.5 µA	I_{ZM}
	Volts	mA	Ohms	%/°C	Volts	mA
ZPU100	88-110	5	300	+.110	75	11.8
ZPU120	107-134	5	330	+.110	90	9.7
ZPU150	130-165	5	360	+.110	112	7.87
ZPU180	160-200	5	380	+.110	134	6.5

Notes: 1. Valid provided that leads are kept at ambient temperature at a distance of 10mm from case.
2. Tested with pulses tp = 20 ms.

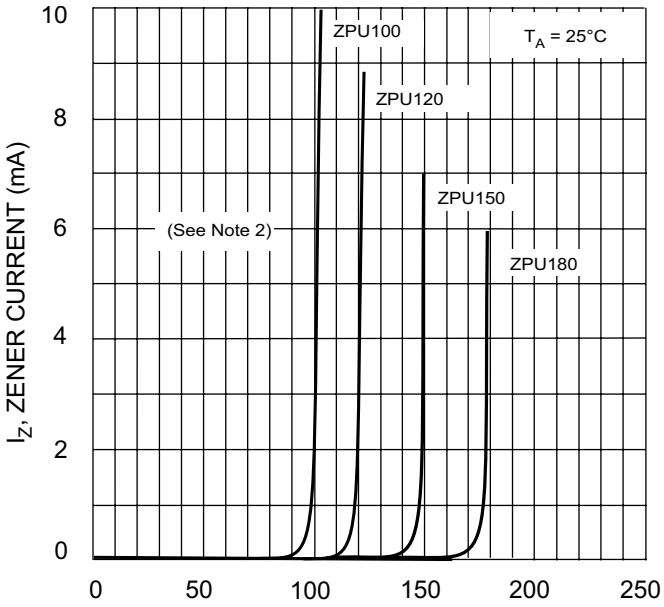


Fig. 1 Zener Breakdown Characteristics

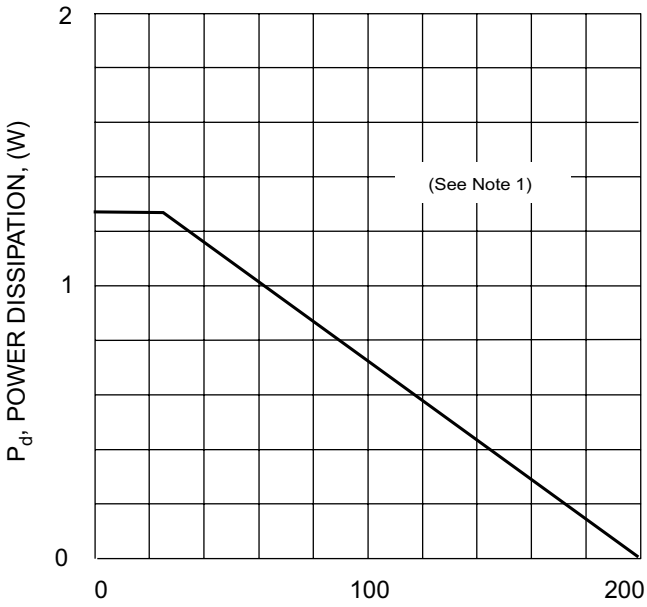


Fig. 2 Power Derating Curve

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