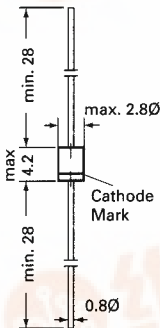


P...B Series
SILICON PLANAR POWER ZENER DIODES

Silicon Planar Power Zener Diodes
for use in stabilizing and clipping circuits with high power rating.



Glass case ≈ JEDEC DO-41

Dimensions in mm

Absolute Maximum Ratings ($T_a = 25\text{ }^{\circ}\text{C}$)

	Symbol	Value	Unit
Zener Current see Table "Characteristics"			
Power Dissipation at $T_{amb} = 25\text{ }^{\circ}\text{C}$	P_{tot}	1 ¹⁾	W
Junction Temperature	T_j	+175	$^{\circ}\text{C}$
Storage Temperature Range	T_s	-65 to + 175	$^{\circ}\text{C}$
1) Valid provided that leads are at a distance of 8 mm from case are kept at ambient temperature			

Characteristics at $T_{amb} = 25\text{ }^{\circ}\text{C}$

	Symbol	Min.	Typ.	Max.	Unit
Thermal Resistance Junction to Ambient Air	R_{thA}	-	-	170 ¹⁾	K/W
Forward Voltage at $I_F = 200\text{ mA}$	V_F	-	-	1.2	V
1) Valid provided that leads are at a distance of 8 mm from case are kept at ambient temperature					

P...B Series

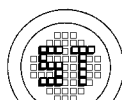
SILICON PLANAR POWER ZENER DIODES

Characteristics at $T_j = 25\text{ }^{\circ}\text{C}$

	Zener Voltage Range ¹⁾		Dynamic Resistance at I_{ZT} $f = 1\text{ kHz}$ $r_{zi}\text{ }\Omega\text{ (Max.)}$	Reverse Leakage Current at $T_{amb} = 25\text{ }^{\circ}\text{C}$ $I_R\text{ }\mu\text{A (Max.) at } V_R\text{ (V)}$		Admissible Zener Current ²⁾ $I_Z\text{ (mA)}$
	$V_Z\text{ (V) at } I_{ZT}\text{ (mA)}$					
P2V7B	2.6 ... 2.9	40	20	200	1	333
P3V0B	2.8 ... 3.2	40	20	200	1	300
P3V3B	3.1 ... 3.5	40	20	100	1	272
P3V6B	3.4 ... 3.8	40	20	80	1	250
P3V9B	3.7 ... 4.1	40	20	60	1	230
P4V3B	4.0 ... 4.6	40	20	40	1	209
P4V7B	4.4 ... 5.0	40	15	40	1	191
P5V1B	4.8 ... 5.4	30	10	20	1	176
P5V6B	5.2 ... 6.0	30	6	10	1	160
P6V2B	5.8 ... 6.6	30	6	10	1	145
P6V8B	6.4 ... 7.2	30	6	10	2	132
P7V5B	7.0 ... 7.9	30	6	10	3	120
P8V2B	7.7 ... 8.7	30	6	10	4	109
P9V1B	8.5 ... 9.6	30	6	10	5	98
P10VB	9.4 ... 10.6	30	7	10	7	90
P11VB	10.4 ... 11.6	20	9	10	9	81
P12VB	11.4 ... 12.6	20	10	10	10	75
P13VB	12.4 ... 14.1	20	10	10	11	69
P15VB	13.9 ... 15.6	20	15	10	12	60
P16VB	15.4 ... 17.1	20	17	10	14	56
P18VB	16.9 ... 19.1	20	20	10	16	50
P20VB	18.9 ... 21.1	10	22	10	18	45
P22VB	20.9 ... 23.1	10	24	10	19	40
P24VB	22.8 ... 25.6	10	28	10	20	37
P27VB	25.5 ... 30.0	10	35	10	23	33
P30VB	28.0 ... 33.0	10	40	10	25	30

¹⁾ Tested with pulse $t_p = 20\text{ ms}$.

²⁾ Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature. This data was calculated using nominal voltages.



SEMTECH ELECTRONICS LTD.

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