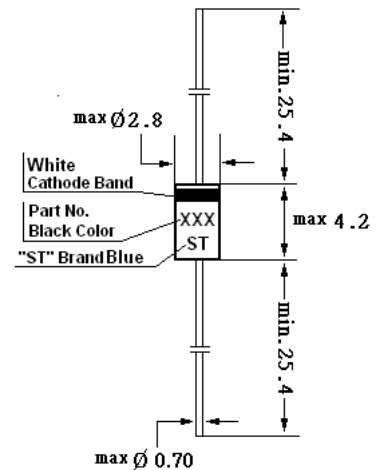


# ZPY3V9 THRU ZPY120

## ZENER DIODES

### Features

- Silicon planar power zener diodes
- For use in stabilizing and clipping circuits with high power rating.
- The zener voltages are graded according to the international E 12 standard. Smaller voltage tolerances are available upon request.



Glass Case JEDEC DO-41  
Dimensions in mm

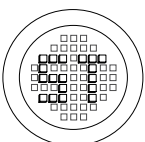
### Mechanical Data

Case: DO-41 Glass Case

### Absolute Maximum Ratings (T<sub>a</sub> = 25° )

	Symbol	Value	Unit
Zener Current (see Table "Characteristics")			
Power Dissipation	P <sub>tot</sub>	1.3 <sup>(1)</sup>	W
Thermal Resistance Junction to Ambient Air	R <sub>θJA</sub>	130 <sup>(1)</sup>	? /W
Junction Temperature	T <sub>j</sub>	175	?
Storage Temperature Range	T <sub>s</sub>	-55 to +175	?

Notes: (1) Valid provided that leads at a distance of 10mm from case are kept at ambient temperature.



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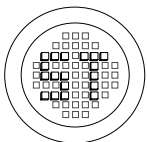
# ZPY3V9 THRU ZPY120

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

TYPE	Zener Voltage at $I_{ZT}$ $V_Z$ (V) <sup>(2)</sup>		Dynamic Resistance at $I_{ZT}$ $f = 1\text{KHz}$ $r_{zj}$ ( $\Omega$ )	Temp. Coeff. of Zener Voltage at $I_{ZT}$ $TC_{VZ}$ ( $10^{-4}/^\circ\text{C}$ )		Test Current $I_{ZT}$ (mA)	Reverse Voltage at $I_R = 0.5\mu\text{A}$ $V_R$ (V)	Admissible Zener Current at $T_a = 25^\circ\text{C}$ $I_Z$ (mA) <sup>(1)</sup>
	Min.	Max.	Max.	Min.	Max.			
ZPY3V9	3.7	4.1	<7	-7	2	100	-	290
ZPY4V3	4.0	4.6	<7	-7	3	100	-	260
ZPY4V7	4.4	5.0	<7	-7	4	100	-	235
ZPY5V1	4.8	5.4	<5	-6	5	100	>0.7	215
ZPY5V6	5.2	6.0	<2	-3	5	100	>1.5	193
ZPY6V2	5.8	6.6	<2	-1	6	100	>2.0	183
ZPY6V8	6.4	7.2	<2	0	7	100	>3.0	157
ZPY7V5	7.0	7.9	<2	0	7	100	>5.0	143
ZPY8V2	7.7	8.7	<2	3	8	100	>6.0	127
ZPY9V1	8.5	9.6	<4	3	8	50	>7.0	117
ZPY10	9.41	10.6	<4	5	9	50	>7.5	105
ZPY11	10.4	11.6	<7	5	10	50	>8.5	94
ZPY12	11.4	12.7	<7	5	10	50	>9.0	85
ZPY13	12.4	14.1	<9	5	10	50	>10	78
ZPY15	13.8	15.8	<9	5	10	50	>11	70
ZPY16	15.3	17.1	<10	7	11	25	>12	63
ZPY18	16.8	19.1	<11	7	11	25	>14	57
ZPY20	18.8	21.2	<12	7	11	25	>15	52
ZPY22	20.8	23.3	<13	7	11	25	>17	48
ZPY24	22.8	25.6	<14	7	12	25	>18	42
ZPY27	25.1	28.9	<15	7	12	25	>20	38
ZPY30	28	32	<20	7	12	25	>22.5	35
ZPY33	31	35	<20	7	12	25	>25	31
ZPY36	34	38	<60	7	12	10	>27	29
ZPY39	37	41	<60	8	12	10	>29	26
ZPY43	40	46	<80	8	13	10	>32	24
ZPY47	44	50	<80	8	13	10	>35	22
ZPY51	48	54	<100	8	13	10	>38	20
ZPY56	52	60	<100	8	13	10	>42	18
ZPY62	58	66	<130	8	13	10	>47	16
ZPY68	64	72	<130	8	13	10	>51	14
ZPY75	70	79	<160	8	13	10	>56	13
ZPY82	77	88	<160	8	13	10	>61	12
ZPY91	85	96	<250	9	13	5	>68	11
ZPY100	94	106	<250	9	13	5	>75	10
ZPY110	104	116	<250	9	13	5	>85	9
ZPY120	114	127	<350	9	13	5	>91	9

Notes: (1) Valid provided that leads are kept at ambient temperature at a distance of 10mm from case.

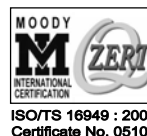
(2) Tested with pulses  $t_p = 20\text{ms}$ .



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Dated : 22/07/2005