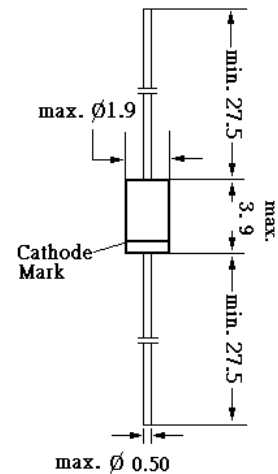


# ZPD 2.7...ZPD 62

## SILICON PLANAR ZENER DIODES

The Zener voltages are graded according to the international E24 standard. Smaller voltage tolerances and higher Zener voltages are upon request.



Glass case JEDEC DO-35  
Dimensions in mm

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

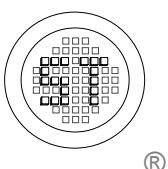
	Symbol	Value	Unit
Zener Current see Table "Characteristics"			
Power Dissipation	$P_{\text{tot}}$	500 <sup>1)</sup>	mW
Junction Temperature	$T_j$	175	$^\circ\text{C}$
Storage Temperature Range	$T_s$	-55 to +175	$^\circ\text{C}$

<sup>1)</sup> Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case

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

	Symbol	Min.	Typ.	Max.	Unit
Thermal Resistance Junction to Ambient Air	$R_{\text{thA}}$	-	-	0.3 <sup>1)</sup>	K/mW

<sup>1)</sup> Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case



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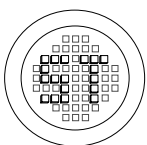
Type	Zener Voltage Range <sup>1)</sup>			Dynamic Resistance			Temp. coeff. of Zener Volt. at $I_Z = 5\text{mA}$ $\alpha_{VZ} 10^{-4}/\text{K}$	Reverse Voltage At $I = 100\text{nA}$ $V_R \text{ V}$	Admissible Zener Current <sup>2)</sup>	
	$V_{Znom}$ V	$I_{ZT}$ mA	for $V_{ZT}$ <sup>2)</sup> V	$r_{ZJT}$ $\Omega$	$r_{ZJK}$ at $\Omega$	$I_{ZK}$ mA			at $T_{amb}=45^\circ\text{C}$ $I_Z \text{ mA}$	at $T_{amb}=25^\circ\text{C}$ $I_Z \text{ mA}$
ZPD 2.7	2.7	5	2.5...2.9	(<83)	<50	1	-9...-4	-	135	160
ZPD 3	3.0	5	2.8...3.2	(<95)	<500	1	-9...-3	-	117	140
ZPD 3.3	3.3	5	3.1...3.5	(<95)	<500	1	-8...-3	-	109	130
ZPD 3.6	3.6	5	3.4...3.8	(<95)	<500	1	-8...-3	-	101	120
ZPD 3.9	3.9	5	3.7...4.1	(<95)	<500	1	-7...-3	-	92	110
ZPD 4.3	4.3	5	4.0...4.6	(<95)	<500	1	-6...-1	-	85	100
ZPD 4.7	4.7	5	4.4...5.0	(<78)	<500	1	-5...+2	-	76	90
ZPD 5.1	5.1	5	4.8...5.4	(<60)	<480	1	-3...+4	>0.8	67	80
ZPD 5.6	5.6	5	5.2...6.0	(<40)	<400	1	-2...+6	>1	59	70
ZPD 6.2	6.2	5	5.8...6.6	(<10)	<200	1	-1...+7	>2	54	64
ZPD 6.8	6.8	5	6.4...7.2	(<8)	<150	1	+2...+7	>3	49	58
ZPD 7.5	7.5	5	7.0...7.9	(<7)	<50	1	+3...+7	>5	44	53
ZPD 8.2	8.2	5	7.7...8.7	(<7)	<50	1	+4...+7	>6	40	47
ZPD 9.1	9.1	5	8.5...9.6	(<10)	<50	1	+5...+8	>7	36	43
ZPD 10	10	5	9.4...10.6	(<15)	<70	1	+5...+8	>7.5	33	40
ZPD 11	11	5	10.4...11.6	(<20)	<70	1	+5...+9	>8.5	30	36
ZPD 12	12	5	11.4...12.7	(<20)	<90	1	+6...+9	>9	28	32
ZPD 13	13	5	12.4...14.1	(<25)	<110	1	+7...+9	>10	25	29
ZPD 15	15	5	13.8...15.6	(<30)	<110	1	+7...+9	>11	23	27
ZPD 16	16	5	15.3...17.1	(<40)	<170	1	+8...+9.5	>12	20	24
ZPD 18	18	5	16.8...19.1	(<50)	<170	1	+8...+9.5	>14	18	21
ZPD 20	20	5	18.8...21.2	(<50)	<220	1	+8...+10	>15	17	20
ZPD 22	22	5	20.8...23.3	(<55)	<220	1	+8...+10	>17	16	18
ZPD 24	24	5	22.8...25.6	(<80)	<220	1	+8...+10	>18	13	16
ZPD 27	27	5	25.1...28.9	(<80)	<250	1	+8...+10	>20	12	14
ZPD 30	30	5	28...32	(<80)	<250	1	+8...+10	>22.5	10	13
ZPD 33	33	5	31...35	(<80)	<250	1	+8...+10	>25	9	12
ZPD 36	36	5	34...38	(<90)	<250	1	+8...+10	>27	9	11
ZPD 39	39	5	37...41	(<90)	<300	1	+10...+12	>29	8	10
ZPD 43	43	5	40...46	(<100)	<700	1	+10...+12	>32	7	9.2
ZPD 47	47	5	44...50	(<100)	<750	1	+10...+12	>35	6	8.5
ZPD 51	51	5	48...54	(<100)	<750	1	+10...+12	>38	6	7.8
ZPD 62	62	2.5	58...66	(<150 <sup>3)</sup> )	<1000 <sup>4)</sup> )	1	Typ.+10 <sup>3)</sup> )	>47	4.8	6.4

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

2) Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case.

3) At  $I_Z = 2.5\text{mA}$

4) At  $I_Z = 0.5\text{mA}$



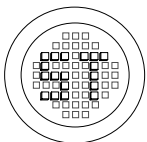
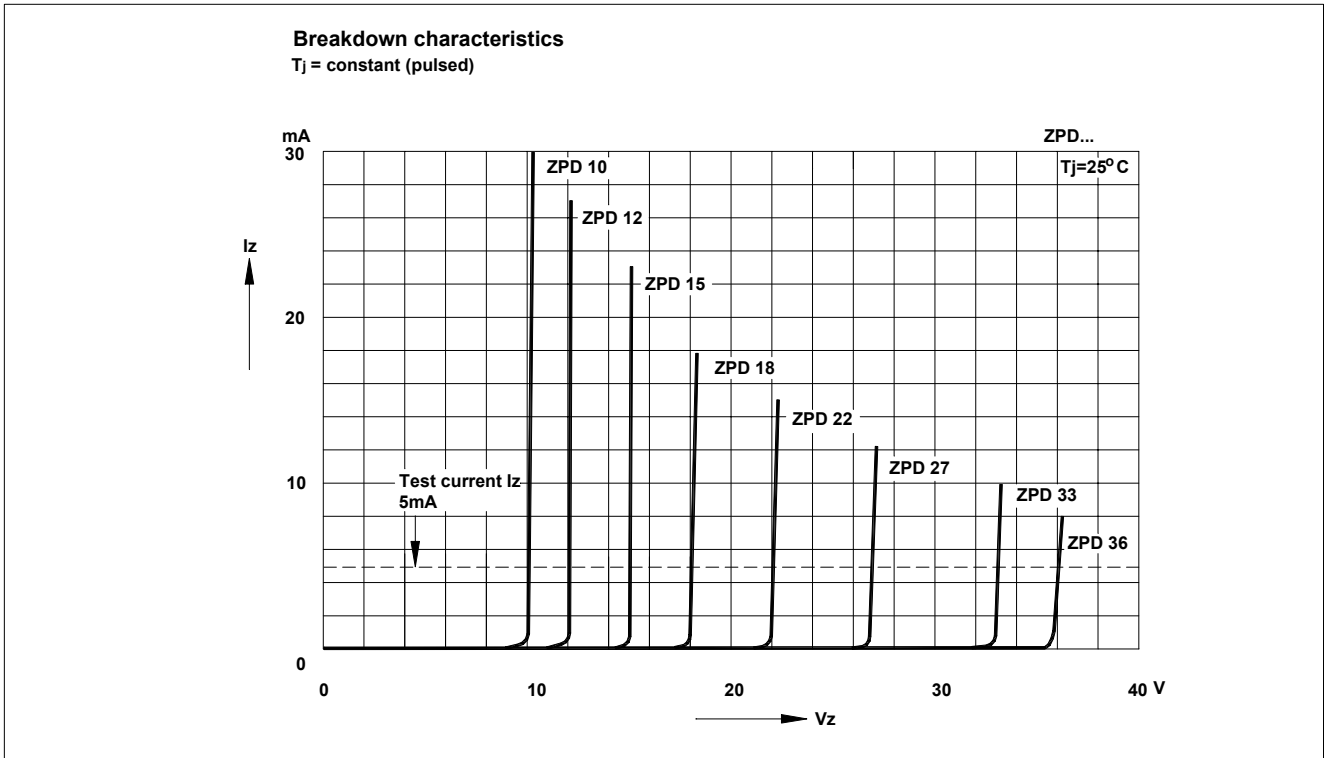
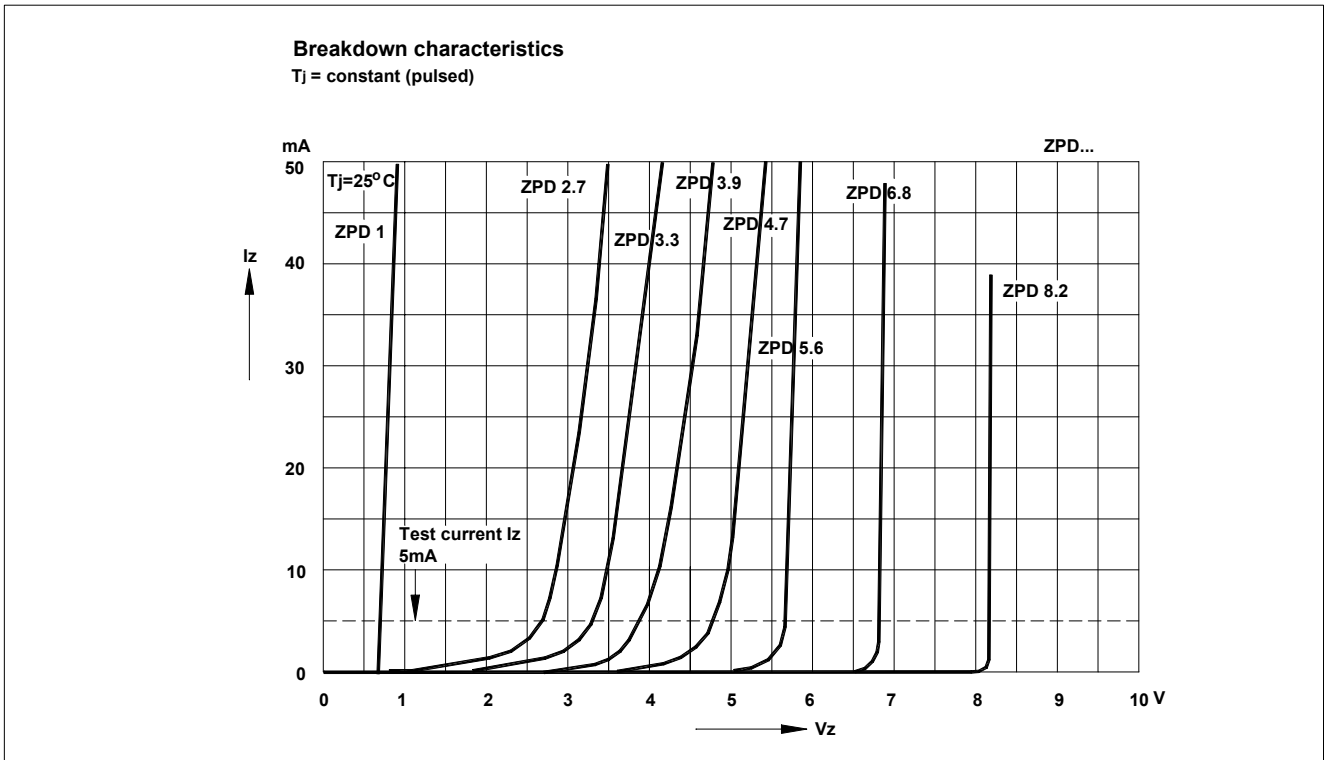
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