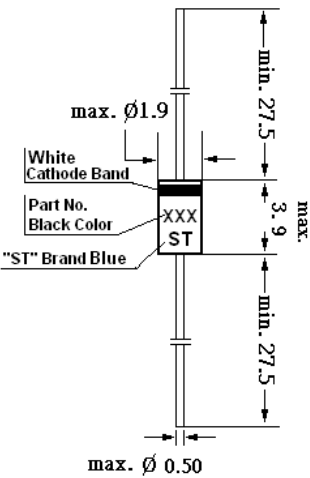


ZPD2V7B...ZPD75B

SILICON PLANAR ZENER DIODES



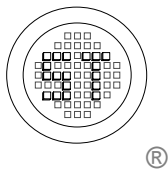
Glass case JEDEC DO-35
Dimensions in mm

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

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	500 ¹⁾	mW
Junction Temperature	T_j	175	$^{\circ}\text{C}$
Storage Temperature Range	T_s	-55 to +175	$^{\circ}\text{C}$
¹⁾ Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case			

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

Parameter	Symbol	Min.	Max.	Unit
Thermal Resistance Junction to Ambient Air	R_{thA}	-	0.3 ¹⁾	K/mW
¹⁾ Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case				



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ZPD2V7B...ZPD75B

Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

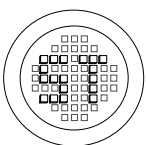
Type	Zener Voltage Range ¹⁾			Dynamic Resistance			Temp. coeff. of Zener Volt. at $I_Z = 5\text{ mA}$ $\alpha_{VZ} 10^{-4}/\text{K}$	Reverse Voltage at $I_R = 100\text{ nA}$ $V_R(\text{V})$	Admissible Zener Current ²⁾	
	$V_{Z\text{nom}}$ V	I_{ZT} mA	for V_{ZT} V	r_{ZJT} Ω	r_{ZJK} at Ω	I_{ZK} mA			at $T_{\text{amb}}=45^\circ\text{C}$ $I_Z(\text{mA})$	at $T_{\text{amb}}=25^\circ\text{C}$ $I_Z(\text{mA})$
ZPD2V7B	2.7	5	2.65...2.75	<83	<500	1	-9...-4	-	135	160
ZPD3V0B	3.0	5	2.94...3.06	<95	<500	1	-9...-3	-	117	140
ZPD3V3B	3.3	5	3.23...3.37	<95	<500	1	-8...-3	-	109	130
ZPD3V6B	3.6	5	3.53...3.67	<95	<500	1	-8...-3	-	101	120
ZPD3V9B	3.9	5	3.82...3.98	<95	<500	1	-7...-3	-	92	110
ZPD4V3B	4.3	5	4.21...4.39	<95	<500	1	-6...-1	-	85	100
ZPD4V7B	4.7	5	4.61...4.79	<78	<500	1	-5...+2	-	76	90
ZPD5V1B	5.1	5	5...5.2	<60	<480	1	-3...+4	>0.8	67	80
ZPD5V6B	5.6	5	5.49...5.71	<40	<400	1	-2...+6	>1	59	70
ZPD6V2B	6.2	5	6.08...6.32	<10	<200	1	-1...+7	>2	54	64
ZPD6V8B	6.8	5	6.66...6.94	<8	<150	1	+2...+7	>3	49	58
ZPD7V5B	7.5	5	7.35...7.65	<7	<50	1	+3...+7	>5	44	53
ZPD8V2B	8.2	5	8.04...8.36	<7	<50	1	+4...+7	>6	40	47
ZPD9V1B	9.1	5	8.92...9.28	<10	<50	1	+5...+8	>7	36	43
ZPD10B	10	5	9.8...10.2	<15	<70	1	+5...+8	>7.5	33	40
ZPD11B	11	5	10.8...11.2	<20	<70	1	+5...+9	>8.5	30	36
ZPD12B	12	5	11.8...12.2	<20	<90	1	+6...+9	>9	28	32
ZPD13B	13	5	12.7...13.3	<25	<110	1	+7...+9	>10	25	29
ZPD15B	15	5	14.7...15.3	<30	<110	1	+7...+9	>11	23	27
ZPD16B	16	5	15.7...16.3	<40	<170	1	+8...+9.5	>12	20	24
ZPD18B	18	5	17.6...18.4	<50	<170	1	+8...+9.5	>14	18	21
ZPD20B	20	5	19.6...20.4	<50	<220	1	+8...+10	>15	17	20
ZPD22B	22	5	21.6...22.4	<55	<220	1	+8...+10	>17	16	18
ZPD24B	24	5	23.5...24.5	<80	<220	1	+8...+10	>18	13	16
ZPD27B	27	5	26.5...27.5	<80	<250	1	+8...+10	>20	12	14
ZPD30B	30	5	29.4...30.6	<80	<250	1	+8...+10	>22.5	10	13
ZPD33B	33	5	32.3...33.7	<80	<250	1	+8...+10	>25	9	12
ZPD36B	36	5	35.3...36.7	<90	<250	1	+8...+10	>27	9	11
ZPD39B	39	5	38.2...39.8	<90	<300	1	+10...+12	>29	8	10
ZPD43B	43	5	42.1...43.9	<100	<700	1	+10...+12	>32	7	9.2
ZPD47B	47	5	46.1...47.9	<100	<750	1	+10...+12	>35	6	8.5
ZPD51B	51	5	50...52	<100	<750	1	+10...+12	>38	6	7.8
ZPD56B	56	2.5	54.9...57.1	<135	<1000	0.5	Typ.+10 ⁽⁴⁾	>42	5.2	7.1
ZPD62B	62	2.5	60.8...63.2	<150	<1000	0.5	Typ.+10 ⁽⁴⁾	>47	4.8	6.4
ZPD68B	68	2.5	66.6...69.4	<200	<1000	0.5	Typ.+10 ⁽⁴⁾	>51	4.1	5.8
ZPD75B	75	2.5	73.5...76.5	<250	<1500	0.5	Typ.+10 ⁽⁴⁾	>55	3.9	5.3

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⁾ The ZPD1 is a silicon diode operated in forward direction. Hence, the subscript of all parameter should be "F" instead of "Z". Connect the cathode terminal to the negative pole.

⁴⁾ at $I_Z = 2.5\text{ mA}$



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ISO/TS 16949 : 2002
Certificate No. 05103



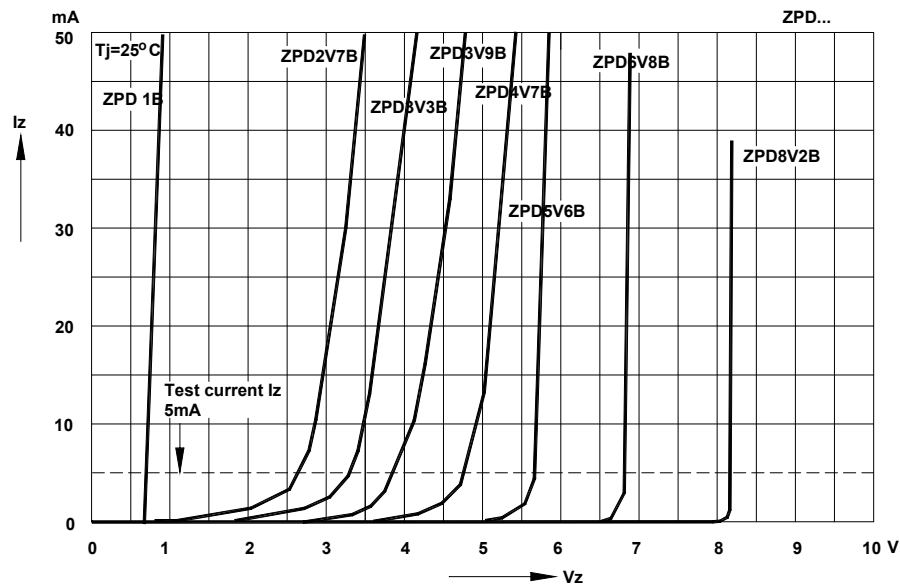
ISO 14001:2004
Certificate No. 7116



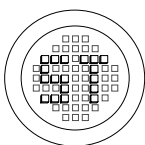
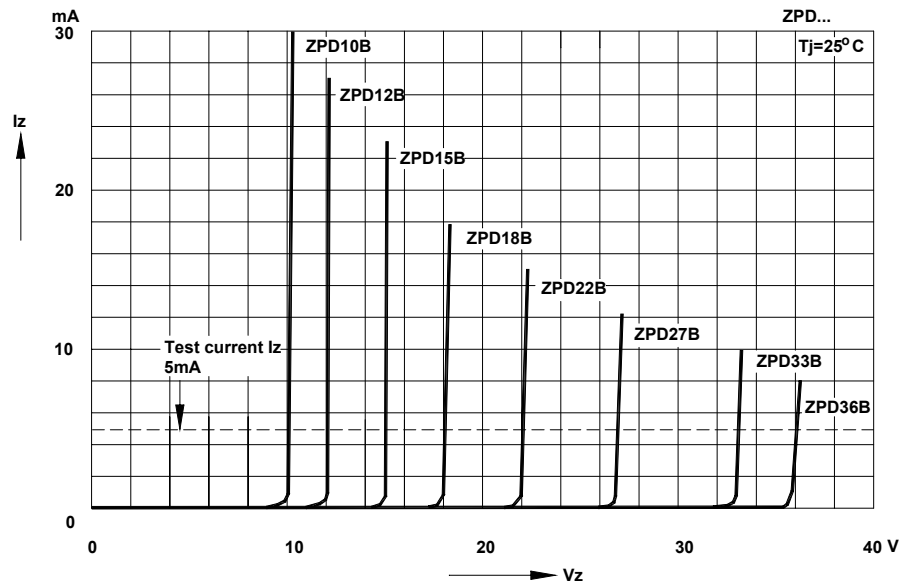
ISO 9001:2000
Certificate No. 0506098

Dated : 03/03/2006

Breakdown characteristics
 $T_j = \text{constant (pulsed)}$



Breakdown characteristics
 $T_j = \text{constant (pulsed)}$



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