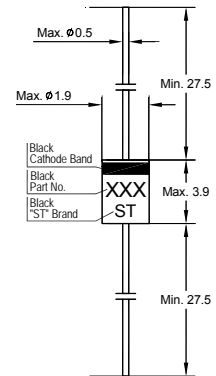


ZPD1...ZPD75

SILICON PLANAR ZENER DIODES



Glass Case DO-35
Dimensions in mm

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

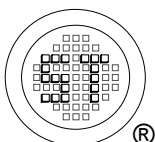
Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	500 ¹⁾	mW
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_s	- 55 to + 175	$^\circ\text{C}$

¹⁾ Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case.

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

Parameter	Symbol	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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Dated : 23/06/2007

ZPD1...ZPD75

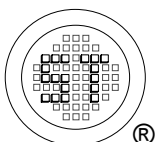
Characteristics (T_a = 25 °C unless otherwise noted)

Type	Zener Voltage Range ¹⁾			Max. Dynamic Resistance			Min. Reverse Voltage at I _R = 100 nA V _R (V)	Admissible Zener Current ²⁾	
	V _{Znom} V	I _{ZT} for mA	V _{ZT} V	r _{ZJT} Ω	r _{ZJK} Ω	at I _{ZK} mA		at T _a = 45 °C I _Z (mA)	at T _a = 25 °C I _Z (mA)
ZPD1 ³⁾	-	5	0.7...0.8	8	50	1	-	280	340
ZPD2V7	2.7	5	2.5...2.9	83	500	1	-	135	160
ZPD3V0	3.0	5	2.8...3.2	95	500	1	-	117	140
ZPD3V3	3.3	5	3.1...3.5	95	500	1	-	109	130
ZPD3V6	3.6	5	3.4...3.8	95	500	1	-	101	120
ZPD3V9	3.9	5	3.7...4.1	95	500	1	-	92	110
ZPD4V3	4.3	5	4...4.6	95	500	1	-	85	100
ZPD4V7	4.7	5	4.4...5	78	500	1	-	76	90
ZPD5V1	5.1	5	4.8...5.4	60	480	1	0.8	67	80
ZPD5V6	5.6	5	5.2...6	40	400	1	1	59	70
ZPD6V2	6.2	5	5.8...6.6	10	200	1	2	54	64
ZPD6V8	6.8	5	6.4...7.2	8	150	1	3	49	58
ZPD7V5	7.5	5	7...7.9	7	50	1	5	44	53
ZPD8V2	8.2	5	7.7...8.7	7	50	1	6	40	47
ZPD9V1	9.1	5	8.5...9.6	10	50	1	7	36	43
ZPD10	10	5	9.4...10.6	15	70	1	7.5	33	40
ZPD11	11	5	10.4...11.6	20	70	1	8.5	30	36
ZPD12	12	5	11.4...12.7	20	90	1	9	28	32
ZPD13	13	5	12.4...14.1	25	110	1	10	25	29
ZPD15	15	5	13.8...15.6	30	110	1	11	23	27
ZPD16	16	5	15.3...17.1	40	170	1	12	20	24
ZPD18	18	5	16.8...19.1	50	170	1	14	18	21
ZPD20	20	5	18.8...21.2	50	220	1	15	17	20
ZPD22	22	5	20.8...23.3	55	220	1	17	16	18
ZPD24	24	5	22.8...25.6	80	220	1	18	13	16
ZPD27	27	5	25.1...28.9	80	250	1	20	12	14
ZPD30	30	5	28...32	80	250	1	22.5	10	13
ZPD33	33	5	31...35	80	250	1	25	9	12
ZPD36	36	5	34...38	90	250	1	27	9	11
ZPD39	39	5	37...41	90	300	1	29	8	10
ZPD43	43	5	40...46	100	700	1	32	7	9.2
ZPD47	47	5	44...50	100	750	1	35	6	8.5
ZPD51	51	5	48...54	100	750	1	38	6	7.8
ZPD56	56	2.5	52...60	135	1000	0.5	42	5.2	7.1
ZPD62	62	2.5	58...66	150	1000	0.5	47	4.8	6.4
ZPD68	68	2.5	64...72	200	1000	0.5	51	4.1	5.8
ZPD75	75	2.5	70...79	250	1500	0.5	55	3.9	5.3

¹⁾ Tested with pulses t_p = 20 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.



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ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001:2004
Certificate No. 7116



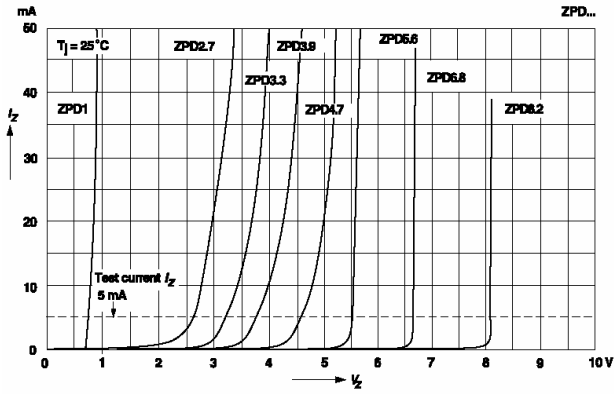
ISO 9001:2000
Certificate No. 0506098

Dated : 23/06/2007

ZPD1...ZPD75

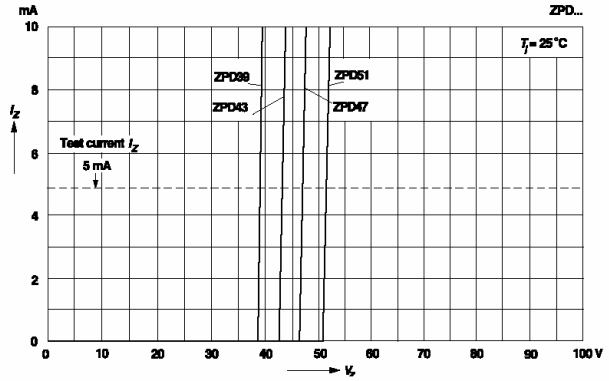
Breakdown characteristics

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



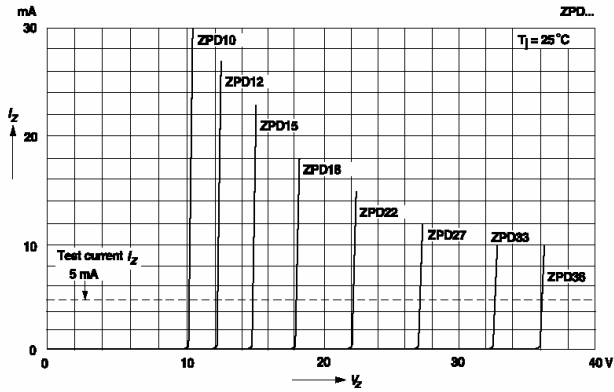
Breakdown characteristics

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

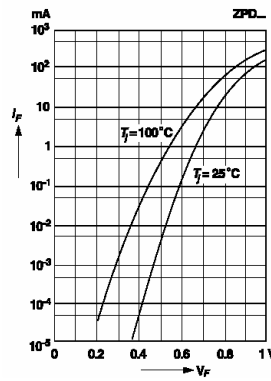


Breakdown characteristics

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

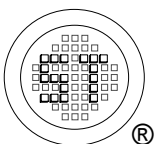
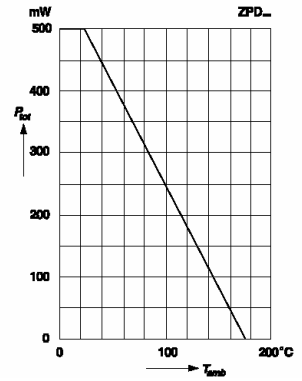


Forward characteristics



Admissible power dissipation versus ambient temperature

Valid provided that leads at a distance of 4 mm from case are kept at ambient temperature



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