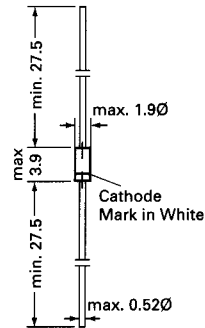


ZPD 2.7 ... ZPD 51

SILICON PLANAR ZENER DIODES

Silicon Epitaxial Planar Diode

The Zener voltages are graded according to the international E 24 standard. Smaller voltage tolerances and higher Zener voltages on request.



Glass case JEDEC DO-35

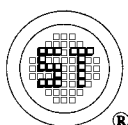
Dimensions in mm

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

	Symbol	Min.	Typ.	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.					



SEMTECH ELECTRONICS LTD.
(wholly owned subsidiary of **HONEY TECHNOLOGY LTD.**)



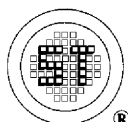
ZPD 2.7 ... ZPD 51

SILICON PLANAR ZENER DIODES

Type	Zener Voltage range ¹⁾			Dynamic resistance			Temp. coeff. of Zener Volt. at $I_z=5\text{mA}$ $\alpha_{VZ} \cdot 10^{-4}/\text{K}$	Reverse Voltage at $I=100\text{nA}$ V_R V	Admissible Zener Current ²⁾	
	V_{Znom} V	I_{ZT} for V_{ZT} ²⁾		r_{zT} Ω	r_{zJK} at I_{ZK}				$T_{amb}=45^\circ\text{C}$ I_z mA	$T_{amb}=25^\circ\text{C}$ I_z mA
		mA	V		Ω	mA				
ZPD2.7	2.7	5	2.5 ... 2.9	(<83)	<50	1	-9 ... -4	-	135	160
ZPD3	3.0	5	2.8 ... 3.2	(<95)	<500	1	-9 ... -3	-	117	140
ZPD3.3	3.3	5	3.1 ... 3.5	(<95)	<500	1	-8 ... -3	-	109	130
ZPD3.6	3.6	5	3.4 ... 3.8	(<95)	<500	1	-8 ... -3	-	101	120
ZPD3.9	3.9	5	3.7 ... 4.1	(<95)	<500	1	-7 ... -3	-	92	110
ZPD4.3	4.3	5	4.0 ... 4.6	(<95)	<500	1	-6 ... -1	-	85	100
ZPD4.7	4.7	5	4.4 ... 5.0	(<78)	<500	1	-5 ... +2	-	76	90
ZPD5.1	5.1	5	4.8 ... 5.4	(<60)	<480	1	-3 ... +4	>0.8	67	80
ZPD5.6	5.6	5	5.2 ... 6.0	(<40)	<400	1	-2 ... +6	>1	49	70
ZPD6.2	6.2	5	5.8 ... 6.6	(<10)	<200	1	-1 ... +7	>2	54	64
ZPD6.8	6.8	5	6.4 ... 7.2	(<8)	<150	1	+2 ... +7	>3	49	58
ZPD7.5	7.5	5	7.0 ... 7.9	(<7)	<50	1	+3 ... +7	>5	44	53
ZPD8.2	8.2	5	7.7 ... 8.7	(<7)	<50	1	+4 ... +7	>6	40	47
ZPD9.1	9.1	5	8.5 ... 9.6	(<10)	<50	1	+5 ... +8	>7	36	43
ZPD10	10	5	9.4 ... 10.6	(<15)	<70	1	+5 ... +8	>7.5	33	40
ZPD11	11	5	10.4 ... 11.6	(<20)	<70	1	+5 ... +9	>8.5	30	36
ZPD12	12	5	11.4 ... 12.7	(<20)	<90	1	+6 ... +9	>9	28	32
ZPD13	13	5	12.4 ... 14.1	(<25)	<110	1	+7 ... +9	>10	25	29
ZPD15	15	5	13.8 ... 15.6	(<30)	<110	1	+7 ... +9	>11	23	27
ZPD16	16	5	15.3 ... 17.1	(<40)	<170	1	+8 ... +9.5	>12	20	24
ZPD18	18	5	16.8 ... 19.1	(<50)	<170	1	+8 ... +9.5	>14	18	21
ZPD20	20	5	18.8 ... 21.2	(<50)	<220	1	+8 ... +10	>15	17	20
ZPD22	22	5	20.8 ... 23.3	(<55)	<220	1	+8 ... +10	>17	16	18
ZPD24	24	5	22.8 ... 25.6	(<80)	<220	1	+8 ... +10	>18	13	16
ZPD27	27	5	25.1 ... 28.9	(<80)	<250	1	+8 ... +10	>20	12	14
ZPD30	30	5	28 ... 32	(<80)	<250	1	+8 ... +10	>22.5	10	13
ZPD33	33	5	31 ... 35	(<80)	<250	1	+8 ... +10	>25	9	12
ZPD36	36	5	34 ... 38	(<90)	<250	1	+8 ... +10	>27	9	11
ZPD39	39	5	37 ... 41	(<90)	<300	1	+10 ... +12	>29	8	10
ZPD43	43	5	40 ... 46	(<100)	<700	1	+10 ... +12	>32	7	9.2
ZPD47	47	5	44 ... 50	(<100)	<750	1	+10 ... +12	>35	6	8.5
ZPD51	51	5	48 ... 54	(<100)	<750	1	+10 ... +12	>38	6	7.8

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.



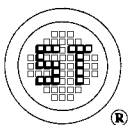
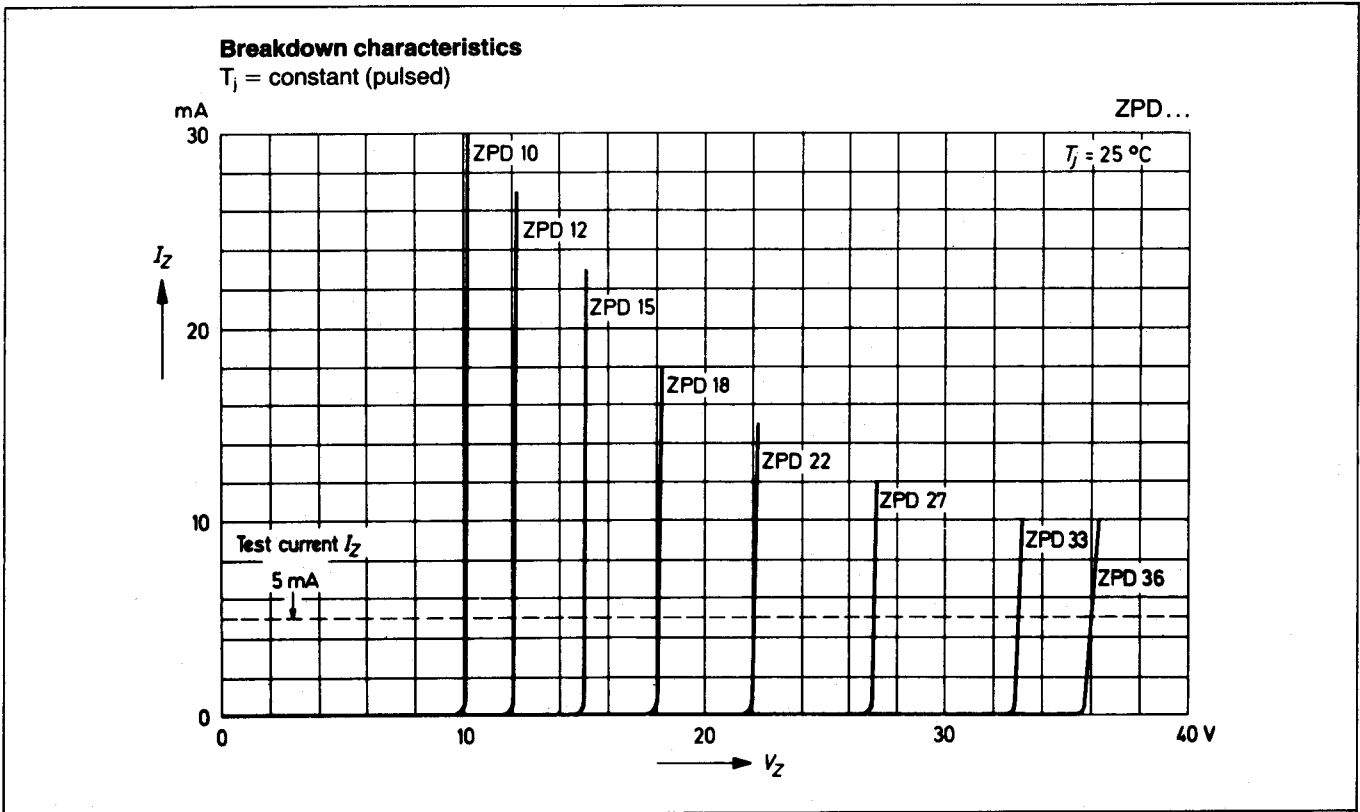
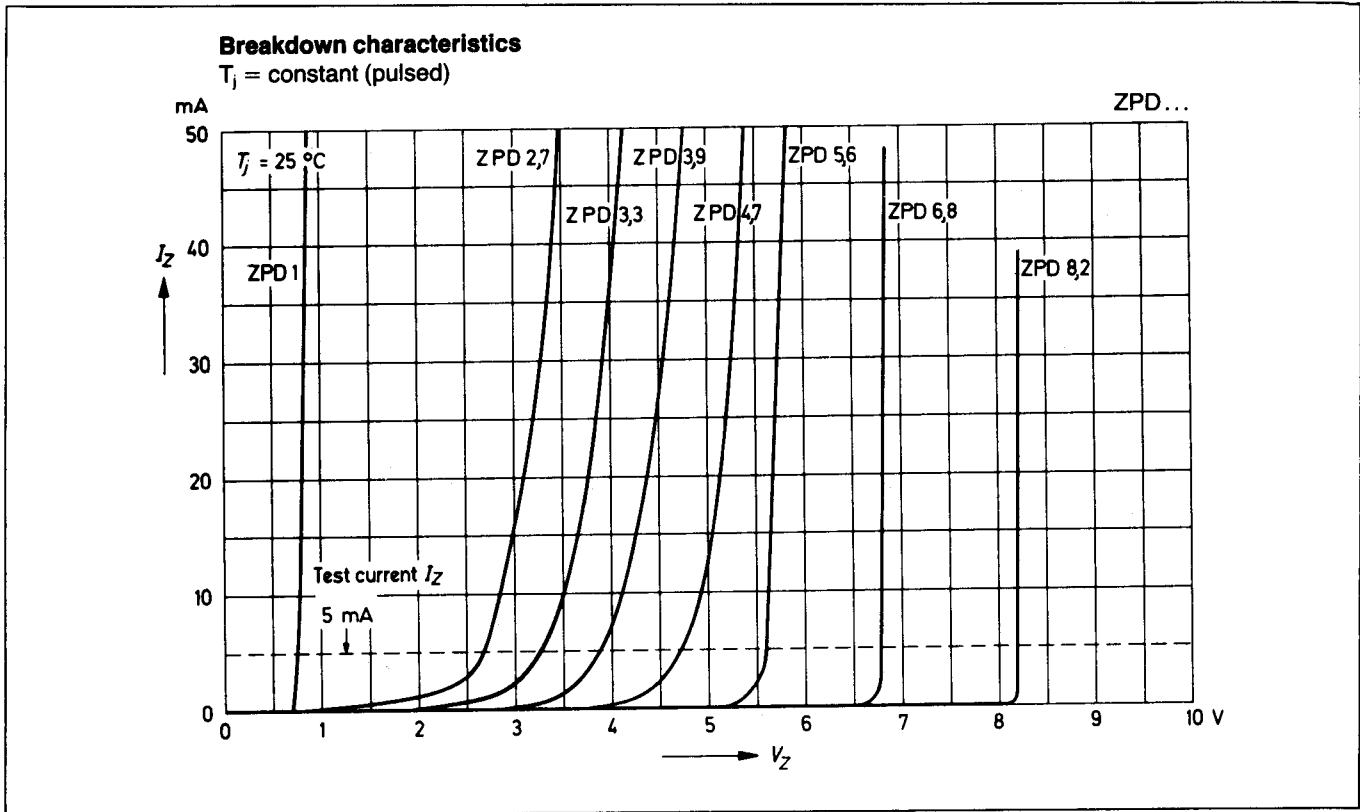
SEMTECH ELECTRONICS LTD.

(wholly owned subsidiary of HONEY TECHNOLOGY LTD.)



ZPD 2.7 ... ZPD 51

SILICON PLANAR ZENER DIODES



SEMTECH ELECTRONICS LTD.
 (wholly owned subsidiary of HONEY TECHNOLOGY LTD.)

