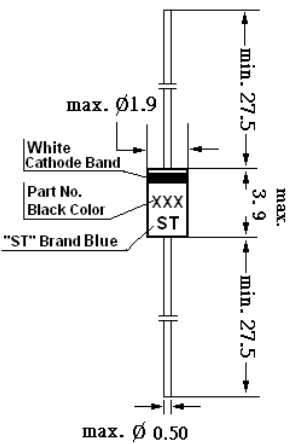


HZ...L Series

SILICON EPITAXIAL PLANER ZENER DIODES FOR LOW NOISE APPLICATION

Features

- Diode noise level of this series is approximately 1/3 – 1/10 lower than the Hz series.
- Low leakage, low zener impedance and maximum power dissipation of 400 mW are ideally suited for stabilized power supply, etc.
- Wide spectrum from 5.2V through 38V of zener voltage provide flexible application.

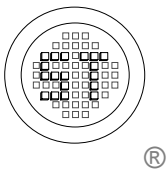


Glass case JEDEC DO-35

Dimensions in mm

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

	Symbol	Value	Unit
Power Dissipation	P_d	400	mW
Junction Temperature	T_j	175	$^{\circ}\text{C}$
Storage Temperature Range	T_s	-55 to +175	$^{\circ}\text{C}$



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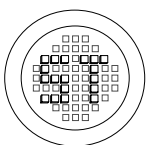


Dated : 22/07/2005

HZ...L Series

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

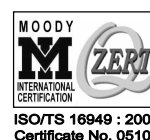
TYPE	Zener Voltage			Reverse Current		Dynamic Resistance	
	$V_Z (\text{V})^{(1)}$			$I_R (\mu\text{A})$		$r_d (\Omega)$	
	Min.	Max.	I_Z (mA)	Max.	V_R (V)	Max.	I_Z (mA)
HZ6LA1	5.2	5.5	0.5	1	2	150	0.5
HZ6LA2	5.3	5.6					
HZ6LA3	5.4	5.7					
HZ6LB1	5.5	5.8				80	0.5
HZ6LB2	5.6	5.9					
HZ6LB3	5.7	6.0					
HZ6LC1	5.8	6.1				60	0.5
HZ6LC2	6.0	6.3					
HZ6LC3	6.1	6.4					
HZ7LA1	6.3	6.6	0.5	1	3.5	60	0.5
HZ7LA2	6.4	6.7					
HZ7LA3	6.6	6.9					
HZ7LB1	6.7	7.0					
HZ7LB2	6.9	7.2					
HZ7LB3	7.0	7.3					
HZ7LC1	7.2	7.6					
HZ7LC2	7.3	7.7					
HZ7LC3	7.5	7.9					
HZ9LA1	7.7	8.1	0.5	1	6	60	0.5
HZ9LA2	7.9	8.3					
HZ9LA3	8.1	8.5					
HZ9LB1	8.3	8.7					
HZ9LB2	8.5	8.9					
HZ9LB3	8.7	9.1					
HZ9LC1	8.9	9.3					
HZ9LC2	9.1	9.5					
HZ9LC3	9.3	9.7					
HZ11LA1	9.5	9.9	0.5	1	8	80	0.5
HZ11LA2	9.7	10.1					
HZ11LA3	9.9	10.3					
HZ11LB1	10.2	10.6					
HZ11LB2	10.4	10.8					
HZ11LB3	10.7	11.1					
HZ11LC1	10.9	11.3					
HZ11LC2	11.1	11.6					
HZ11LC3	11.4	11.9					
HZ12LA1	11.6	12.1	0.5	1	10.5	80	0.5
HZ12LA2	11.9	12.4					
HZ12LA3	12.2	12.7					
HZ12LB1	12.4	12.9					
HZ12LB2	12.6	13.1					
HZ12LB3	12.9	13.4					
HZ12LC1	13.2	13.7					
HZ12LC2	13.5	14.0					
HZ12LC3	13.8	14.3					
HZ15L1	14.1	14.7	0.5	1	13	80	0.5
HZ15L2	14.5	15.1					
HZ15L3	14.9	15.5					
HZ16L1	15.3	15.9	0.5	1	14	80	0.5
HZ16L2	15.7	16.5					
HZ16L3	16.3	17.1					



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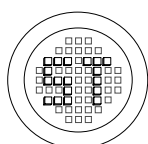
Characteristics at $T_a = 25^\circ\text{C}$

TYPE	Zener Voltage			Reverse Current		Dynamic Resistance	
	$V_Z (V)^{(1)}$			$I_R (\mu A)$		$r_d (\Omega)$	
	Min.	Max.	I_Z (mA)	Max.	V_R (V)	Max.	I_Z (mA)
HZ18L1	16.9	17.7	0.5	1	15	80	0.5
HZ18L2	17.5	18.3					
HZ18L3	18.1	19.0					
HZ20L1	18.8	19.7	0.5	1	18	100	0.5
HZ20L2	19.5	20.4					
HZ20L3	20.2	21.1					
HZ22L1	20.9	21.9	0.5	1	20	100	0.5
HZ22L2	21.6	22.6					
HZ22L3	22.3	23.3					
HZ24L1	22.9	24.0	0.5	1	22	120	0.5
HZ24L2	23.6	24.7					
HZ24L3	24.3	25.5					
HZ27L1	25.2	26.6	0.5	1	24	150	0.5
HZ27L2	26.2	27.6					
HZ27L3	27.2	28.6					
HZ30L1	28.2	29.6	0.5	1	27	200	0.5
HZ30L2	29.2	30.6					
HZ30L3	30.2	31.6					
HZ33L1	31.2	32.6	0.5	1	30	250	0.5
HZ33L2	32.2	33.6					
HZ33L3	33.2	34.6					
HZ36L1	34.2	35.7	0.5	1	33	300	0.5
HZ36L2	35.3	36.8					
HZ36L3	36.4	38.0					

Note. 1) Tested with DC.

2) Type No. is as follow : HZ6A1L, HZ6A2 L, HZ36-3 L

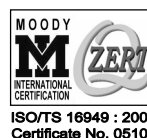
3) Tested with pulses $t_p = 20$ ms.



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HZ...L Series

Fig.1- Zener current versus zener voltage

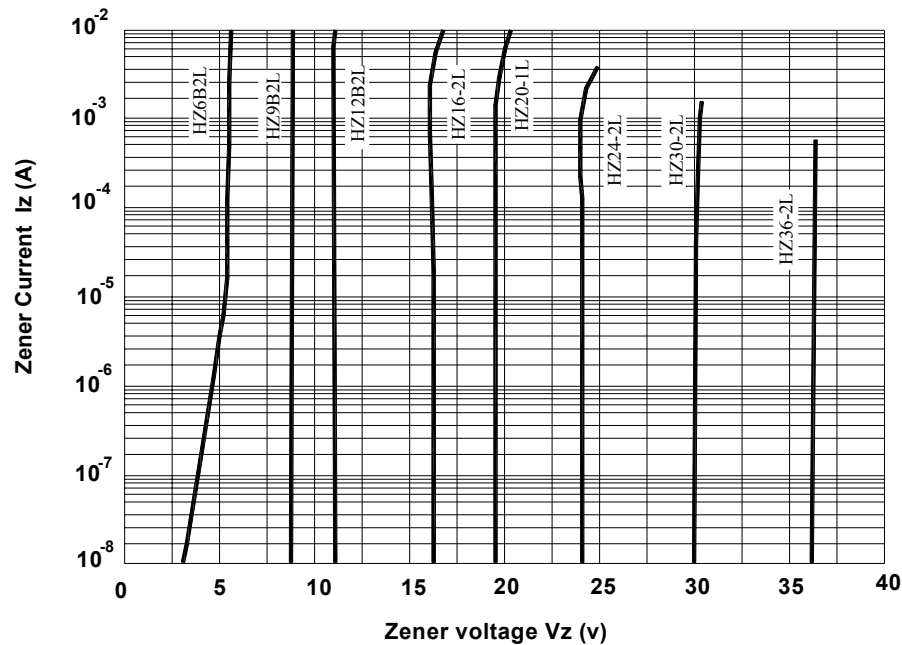


Fig.2 Temperature Coefficient Vs. Zener voltage

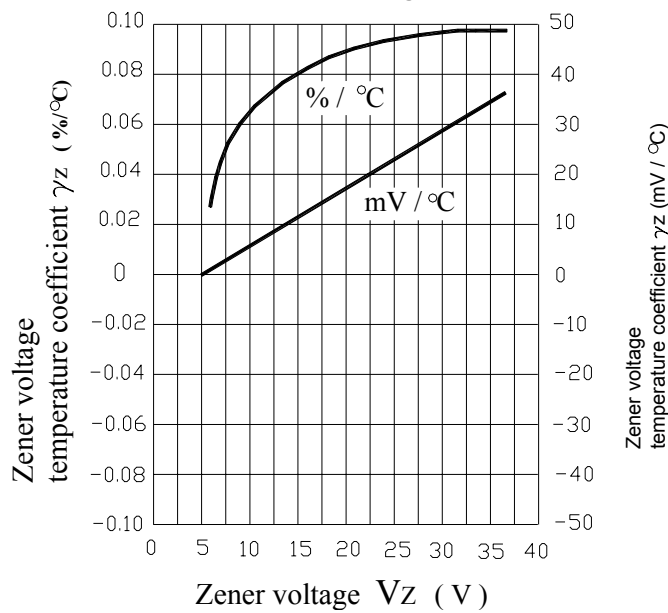
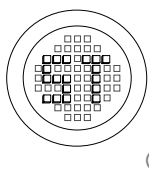
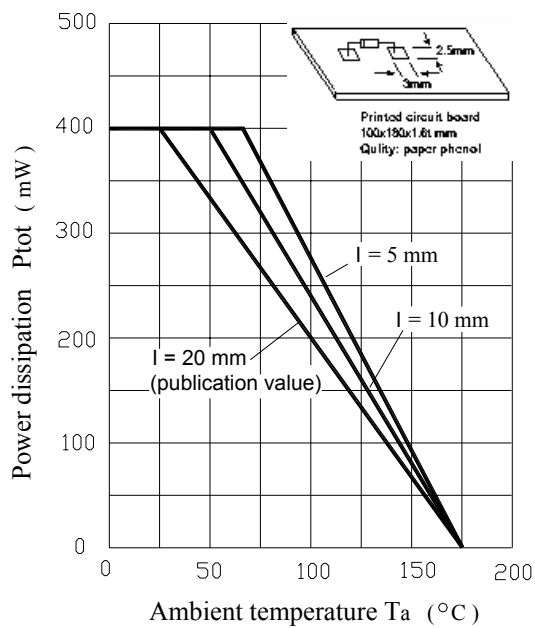


Fig. 3 Power dissipation Vs. Ambient temperature



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