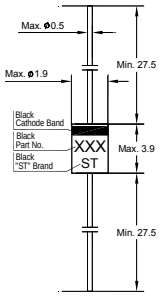
HZ…L Series

Silicon Epitaxial Planar Zener Diodes



Glass Case DO-35
Dimensions in mm

Features

- Diode noise level of this series is approximately 1/3 - 1/10 lower than the HZ series.
- Wide spectrum from 5.2 V through 38 V of Zener voltage provide flexible application.

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Power Dissipation	P_d	500	mW
Junction Temperature	T_j	175	°C
Storage Temperature Range	T_{stg}	- 55 to + 175	°C

Characteristics at T_a = 25 °C (V_F = 1 V Max. at I_F = 100 mA)

Type	Zener Voltage [1]			Reverse Leakage Current		Dynamic Resistance	
	V_Z		at I_{ZT}	I_R	at V_R	Z_{ZT}	at I_{ZT}
	Min. (V)	Max. (V)	(mA)	Max. (µA)	(V)	Max. (Ω)	(mA)
HZ6LA1	5.2	5.5	0.5	1	2	150	0.5
HZ6LA2	5.3	5.6	0.5	1	2	150	0.5
HZ6LA3	5.4	5.7	0.5	1	2	150	0.5
HZ6LB1	5.5	5.8	0.5	1	2	80	0.5
HZ6LB2	5.6	5.9	0.5	1	2	80	0.5
HZ6LB3	5.7	6	0.5	1	2	80	0.5
HZ6LC1	5.8	6.1	0.5	1	2	60	0.5
HZ6LC2	6	6.3	0.5	1	2	60	0.5
HZ6LC3	6.1	6.4	0.5	1	2	60	0.5
HZ7LA1	6.3	6.6	0.5	1	3.5	60	0.5
HZ7LA2	6.4	6.7	0.5	1	3.5	60	0.5
HZ7LA3	6.6	6.9	0.5	1	3.5	60	0.5
HZ7LB1	6.7	7	0.5	1	3.5	60	0.5
HZ7LB2	6.9	7.2	0.5	1	3.5	60	0.5
HZ7LB3	7	7.3	0.5	1	3.5	60	0.5
HZ7LC1	7.2	7.6	0.5	1	3.5	60	0.5
HZ7LC2	7.3	7.7	0.5	1	3.5	60	0.5
HZ7LC3	7.5	7.9	0.5	1	3.5	60	0.5
HZ9LA1	7.7	8.1	0.5	1	6	60	0.5
HZ9LA2	7.9	8.3	0.5	1	6	60	0.5
HZ9LA3	8.1	8.5	0.5	1	6	60	0.5
HZ9LB1	8.3	8.7	0.5	1	6	60	0.5
HZ9LB2	8.5	8.9	0.5	1	6	60	0.5
HZ9LB3	8.7	9.1	0.5	1	6	60	0.5
HZ9LC1	8.9	9.3	0.5	1	6	60	0.5
HZ9LC2	9.1	9.5	0.5	1	6	60	0.5
HZ9LC3	9.3	9.7	0.5	1	6	60	0.5
HZ11LA1	9.5	9.9	0.5	1	8	80	0.5
HZ11LA2	9.7	10.1	0.5	1	8	80	0.5

HZ…L Series

Characteristics at T_a = 25 °C (V_F = 1 V Max. at I_F = 100 mA)

Type	Zener Voltage [1]			Reverse Leakage Current		Dynamic Resistance	
	V_Z		at I_{ZT}	I_R	at V_R	Z_{ZT}	at I_{ZT}
	Min. (V)	Max. (V)	(mA)	Max. (µA)	(V)	Max. (Ω)	(mA)
HZ11LA3	9.9	10.3	0.5	1	8	80	0.5
HZ11LB1	10.2	10.6	0.5	1	8	80	0.5
HZ11LB2	10.4	10.8	0.5	1	8	80	0.5
HZ11LB3	10.7	11.1	0.5	1	8	80	0.5
HZ11LC1	10.9	11.3	0.5	1	8	80	0.5
HZ11LC2	11.1	11.6	0.5	1	8	80	0.5
HZ11LC3	11.4	11.9	0.5	1	8	80	0.5
HZ12LA1	11.6	12.1	0.5	1	10.5	80	0.5
HZ12LA2	11.9	12.4	0.5	1	10.5	80	0.5
HZ12LA3	12.2	12.7	0.5	1	10.5	80	0.5
HZ12LB1	12.4	12.9	0.5	1	10.5	80	0.5
HZ12LB2	12.6	13.1	0.5	1	10.5	80	0.5
HZ12LB3	12.9	13.4	0.5	1	10.5	80	0.5
HZ12LC1	13.2	13.7	0.5	1	10.5	80	0.5
HZ12LC2	13.5	14	0.5	1	10.5	80	0.5
HZ12LC3	13.8	14.3	0.5	1	10.5	80	0.5
HZ15L1	14.1	14.7	0.5	1	13	80	0.5
HZ15L2	14.5	15.1	0.5	1	13	80	0.5
HZ15L3	14.9	15.5	0.5	1	13	80	0.5
HZ16L1	15.3	15.9	0.5	1	14	80	0.5
HZ16L2	15.7	16.5	0.5	1	14	80	0.5
HZ16L3	16.3	17.1	0.5	1	14	80	0.5
HZ18L1	16.9	17.7	0.5	1	15	80	0.5
HZ18L2	17.5	18.3	0.5	1	15	80	0.5
HZ18L3	18.1	19	0.5	1	15	80	0.5
HZ20L1	18.8	19.7	0.5	1	18	100	0.5
HZ20L2	19.5	20.4	0.5	1	18	100	0.5
HZ20L3	20.2	21.1	0.5	1	18	100	0.5
HZ22L1	20.9	21.9	0.5	1	20	100	0.5
HZ22L2	21.6	22.6	0.5	1	20	100	0.5
HZ22L3	22.3	23.3	0.5	1	20	100	0.5
HZ24L1	22.9	24	0.5	1	22	120	0.5
HZ24L2	23.6	24.7	0.5	1	22	120	0.5
HZ24L3	24.3	25.5	0.5	1	22	120	0.5
HZ27L1	25.2	26.6	0.5	1	24	150	0.5
HZ27L2	26.2	27.6	0.5	1	24	150	0.5
HZ27L3	27.2	28.6	0.5	1	24	150	0.5
HZ30L1	28.2	29.6	0.5	1	27	200	0.5
HZ30L2	29.2	30.6	0.5	1	27	200	0.5
HZ30L3	30.2	31.6	0.5	1	27	200	0.5
HZ33L1	31.2	32.6	0.5	1	30	250	0.5
HZ33L2	32.2	33.6	0.5	1	30	250	0.5
HZ33L3	33.2	34.6	0.5	1	30	250	0.5
HZ36L1	34.2	35.7	0.5	1	33	300	0.5
HZ36L2	35.3	36.8	0.5	1	33	300	0.5
HZ36L3	36.4	38	0.5	1	33	300	0.5

[1] Tested with pulses tp = 20 ms.

Fig.1- Zener current versus zener voltage

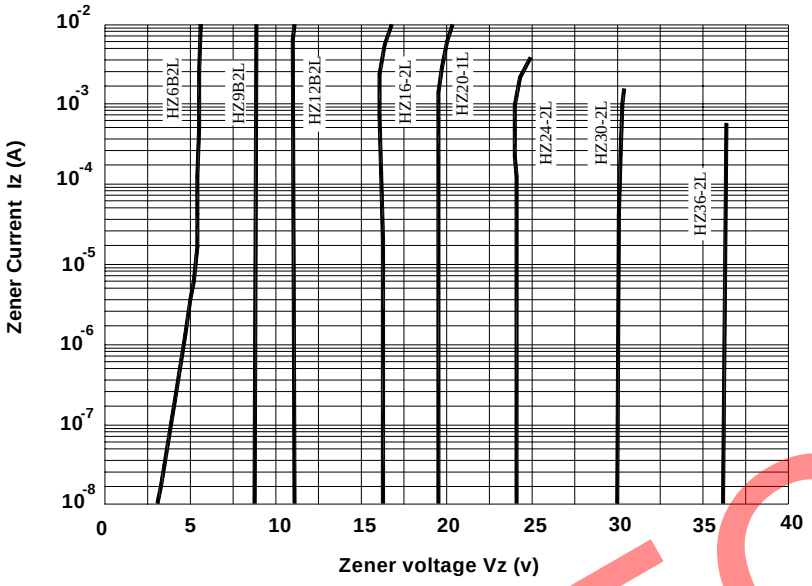


Fig.2 Temperature Coefficient Vs. Zener voltage

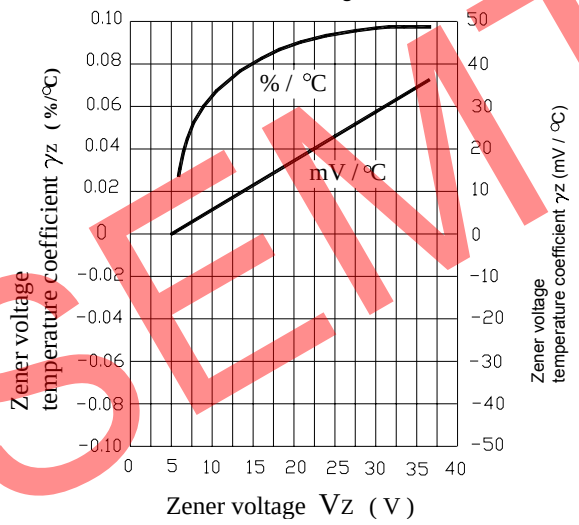


Fig. 3 Power dissipation Vs. Ambient temperature