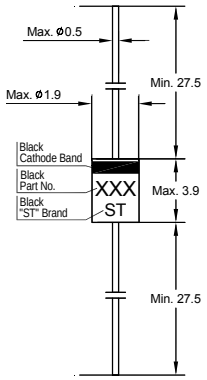
HC Series

SILICON PLANAR ZENER DIODES



Glass Case DO-35
Dimensions in mm

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	500 [1)]	mW
Junction Temperature	T_j	175	°C
Storage Temperature Range	T_S	- 65 to + 175	°C
[1)] Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case.			

Characteristics at T_a = 25 °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.			

Characteristics at T_j = 25 °C

Type	Zener Voltage [1]			Dynamic Resistance		Reverse Leakage Current (I_R at V_R)	
	Min. (V)	Max. (V)	I_{ZT} (mA)	(Ω) Max. at I_{ZT}	I_{ZT} (mA)	I_R (µA) Max.	V_R (V)
2V2HC	2.09	2.41	20	120	20	120	0.7
2V2HCA	2.12	2.3					
2V2HCB	2.22	2.41					
2V4HC	2.3	2.64	20	120	20	120	1
2V4HCA	2.33	2.52					
2V4HCB	2.43	2.63					
2V7HC	2.5	2.9	20	100	20	100	1
2V7HCA	2.54	2.75					
2V7HCB	2.69	2.91					
3V0HC	2.8	3.2	20	80	20	50	1
3V0HCA	2.85	3.07					
3V0HCB	3.01	3.22					
3V3HC	3.1	3.5	20	70	20	20	1
3V3HCA	3.16	3.38					
3V3HCB	3.32	3.53					
3V6HC	3.4	3.8	20	60	20	10	1
3V6HCA	3.47	3.68					
3V6HCB	3.62	3.83					
3V9HC	3.7	4.1	20	50	20	5	1
3V9HCA	3.77	3.98					
3V9HCB	3.92	4.14					
4V3HC	4	4.5	20	40	20	5	1
4V3HCA	4.05	4.26					
4V3HCB	4.2	4.4					
4V3HCC	4.34	4.53					
4V7HC	4.4	4.9	20	25	20	5	1
4V7HCA	4.47	4.65					
4V7HCB	4.59	4.77					
4V7HCC	4.71	4.91					
5V1HC	4.8	5.4	20	20	20	5	1.5
5V1HCA	4.85	5.03					
5V1HCB	4.97	5.18					
5V1HCC	5.12	5.35					
5V6HC	5.3	6	20	13	20	5	2.5
5V6HCA	5.29	5.52					
5V6HCB	5.46	5.7					
5V6HCC	5.64	5.88					

[1] Tested with pulse tp = 20 ms.

Characteristics at T_j = 25 °C

Type	Zener Voltage [1]			Dynamic Resistance		Reverse Leakage Current (I_R at V_R)	
	Min. (V)	Max. (V)	I_{ZT} (mA)	(Ω) Max. at I_{ZT}	I_{ZT} (mA)	I_R (μA) Max.	V_R (V)
6V2HC	5.8	6.6	20	10	20	5	3
6V2HCA	5.81	6.06					
6V2HCB	5.99	6.24					
6V2HCC	6.16	6.4					
6V8HC	6.4	7.2	20	8	20	2	3.5
6V8HCA	6.32	6.59					
6V8HCB	6.52	6.79					
6V8HCC	6.7	6.97					
7V5HC	7	7.9	20	8	20	0.5	4
7V5HCA	6.88	7.19					
7V5HCB	7.11	7.41					
7V5HCC	7.33	7.64					
8V2HC	7.7	8.7	20	8	20	0.5	5
8V2HCA	7.56	7.9					
8V2HCB	7.82	8.15					
8V2HCC	8.07	8.41					
9V1HC	8.5	9.6	20	8	20	0.5	6
9V1HCA	8.33	8.7					
9V1HCB	8.61	8.99					
9V1HCC	8.89	9.29					
10HC	9.4	10.9	20	8	20	0.2	7
10HCA	9.19	9.59					
10HCB	9.48	9.9					
10HCC	9.82	10.3					
11HC	10.4	11.6	10	10	10	0.2	8
11HCA	10.18	10.63					
11HCB	10.5	10.95					
11HCC	10.82	11.26					
12HC	11.4	12.6	10	12	10	0.2	9
12HCA	11.13	11.63					
12HCB	11.5	11.92					
12HCC	11.8	12.3					
13HC	12.4	14.1	10	14	10	0.2	10
13HCA	12.18	12.71					
13HCB	12.59	13.16					
13HCC	13.03	13.62					
15HC	13.8	15.6	10	16	10	0.2	11
15HCA	13.48	14.09					
15HCB	13.95	14.56					
15HCC	14.42	15.52					

[1] Tested with pulse tp = 20 ms.

Characteristics at T_j = 25 °C

Type	Zener Voltage [1]			Dynamic Resistance		Reverse Leakage Current (I_R at V_R)	
	Min. (V)	Max. (V)	I_{ZT} (mA)	(Ω) Max. at I_{ZT}	I_{ZT} (mA)	I_R (µA) Max.	V_R (V)
16HC	15.3	17.1	10	18	10	0.2	12
16HCA	14.87	15.5					
16HCB	15.33	15.96					
16HCC	15.79	16.5					
18HC	16.8	19.1	10	23	10	0.2	13
18HCA	16.34	17.06					
18HCB	16.9	17.67					
18HCC	17.51	18.3					
20HC	18.8	21.6	10	28	10	0.2	15
20HCA	18.11	18.92					
20HCB	18.73	19.57					
20HCC	19.38	20.22					
20HCD	19.88	20.72					
22HC	20.8	23.3	5	30	5	0.2	17
22HCA	20.23	21.08					
22HCB	20.76	21.65					
22HCC	21.22	22.09					
22HCD	21.68	22.61					
24HC	21.8	25.6	5	35	5	0.2	19
24HCA	22.26	23.12					
24HCB	22.75	23.73					
24HCC	23.29	24.27					
24HCD	23.81	24.81					
27HC	25.1	28.9	5	45	5	0.2	21
27HCA	24.26	25.52					
27HCB	24.97	26.26					
27HCC	25.63	26.95					
27HCD	26.29	27.64					
30HC	28	32	5	55	5	0.2	23
30HCA	26.99	28.39					
30HCB	27.7	29.13					
30HCC	28.36	29.82					
30HCD	29.02	30.51					
33HC	31	35	5	65	5	0.2	25
33HCA	29.68	31.22					
33HCB	30.32	31.88					
33HCC	30.9	32.5					
33HCD	31.49	33.11					

[1] Tested with pulse tp = 20 ms.