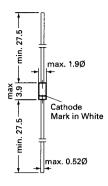
Silicon Planar Zener Diodes



Glass case JEDEC DO-35

Dimensions in mm

Absolute Maximum Ratings $(T_a = 25 \degree C)$

	Symbol	Value	Unit
Zener Current see Table "Characteristics"			
Power Dissipation at T _{amb} = 25 °C	P _{tot}	500 ¹⁾	mW
Junction Temperature	T _i	175	°C
Storage Temperature Range	T _s	-55 to + 175	°C

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

	Symbol	Min.	Тур.	Max.	Unit
Thermal Resistance Junction to Ambient Air	R _{thA}	-	-	0.31)	K/mW
Forward Voltage at I _s = 100 mA	V _F	<u>.</u> .	-	1	V

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





HS Series SILICON PLANAR ZENER DIODE

Characteristics at Tj = 25 °C

TYPE	Zener Voltage			Dynamic Resistance		Reverse Leakage Current (I _R at V _R)	
DO-35	Min.	Max	I _{ZT}	Ohm at I _{zT}	I _{ZT} (mA)	I _R (uA) Max.	V _R (V)
	(V)	(V)	(mA)				
2.0 HS	1.88	2.20					
2.0 HSA	1.88	2.10	5	100	5	120	0.5
2.0 HSB	2.02	2.20					
2.2 HS	2.12	2.41		100	5	120	
2.2 HSA	2.12	2.30	5				0.7
2.2 HSB	2.22	2.41					
2.4 HS	2.33	2.63					
2.4 HSA	2.33	2.52	5	100	5	120	1.0
2.4 HSB	2.43	2.63					
2.7 HS	2.54	2.91					
2.7 HSA	2.54	2.75	5	110	5	100	1.0
2.7 HSB	2.69	2.91					
3.0 HS	2.85	3.22					
3.0 HSA	2.85	3.07	5	120	5	50	1.0
3.0 HSB	3.01	3.22	1				
3.3 HS	3.16	3.53			5		1.0
3.3 HSA	3.16	3.38	5	120		20	
3.3 HSB	3.32	3.53	1				
3.6 HS	3.47	3.83			5	10	
3.6 HSA	3.47	3.68	5	120			1.0
3.6 HSB	3.62	3.83	1				
3.9 HS	3.77	4.14					
3.9 HSA	3.77	3.98	5	120	5	5	1.0
3.9 HSB	3.92	4.14		1			
4.3 HS	4.05	4.53				5	
4.3 HSA	4.05	4.26	1				1.0
4.3 HSB	4.20	4.40	5	120	5		
4.3 HSC	4.34	4.53	1				
4.7 HS	4.47	4.91					
4.7 HSA	4.47	4.65					
4.7 HSB	4.59	4.77	5	100	5	5	1.0
4.7 HSC	4.71	4.91					
5.1 HS	4.85	5.35					
5.1 HSA	4.85	5.03	1				
5.1 HSB	4.97	5.18	5	70	5	5	1.5
5.1 HSC	5.12	5.35					
5.6 HS	5.29	5.88					
5.6 HSA	5.29	5.52					
5.6 HSB	5.46	5.70	5	40	5	5	2.5
5.6 HSC	5.64	5.88					
6.2 HS	5.81	6.40					
6.2 HSA	5.81	6.06					
6.2 HSB	5.99	6.24	5	30	5	5	3.0
6.2 HSC	6.16	6.40	_		-		3.0

¹⁾ Tested with pulse tp = 40 ms.

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







HS Series SILICON PLANAR ZENER DIODE

Characteristics at Tj = 25 °C

TYPE		Zener Voltage	•	Dynamic Resistance Reverse Current (
DO-35	Min.	Max	I _{zt} .	Ohm at I _{zt}	I _{zt} (mA)	I _B (uA) Max.	V _R (V)
	(V)	(V)	(mA)				
6.8 HS	6.32	6.97	1				
6.8 HSA	6.32	6.59	1				
6.8 HSB	6.52	6.79	5	25	5	2	3.5
6.8 HSC	6.70	6.97]				
7.5 HS	6.88	7.64					
7.5 HSA	6.88	7.19	1			0.5	4.0
7.5 HSB	7.11	7.41	5	25	5		
7.5 HSC	7.33	7.64	1				
8.2 HS	7.56	8.41					
8.2 HSA	7.56	7.90	1		5		
8.2 HSB	7.82	8.15	5	20		0.5	5.0
8.2 HSC	8.07	8.41	1				
9.1 HS	8.33	9.29					
9.1 HSA	8.33	8.70	1		5	0.5	
9.1 HSB	8.61	8.99	5	20			6.0
9.1 HSC	8.89	9.29	1				
10 HS	9.19	10.30					
10 HSA	9.19	9.59		20	5	0.2	7.0
10 HSB	9.48	9.90	5				
10 HSC	9.82	10.30	†				
11 HS	10.18	11.26					
11 HSA	10.18	10.63	1		5	0.2	8.0
11 HSB	10.50	10.95	5	20			
11 HSC	10.82	11.26					
12 HS	11.13	12.30					
12 HSA	11.13	11.63	1	25	5	0.2	9.0
12 HSB	11.50	11.92	5				
12 HSC	11.80	12.30					
13 HS	12.18	13.62		+			
13 HSA	12.18	12.71	5	25	5		10
13 HSB	12.59	13.16				0.2	
13 HSC	13.03	13.62					
15 HS	13.48	15.02			, .		
15 HSA	13.48	14.09	5		5 5	0.2	
15 HSB	13.95	14.56		25			11
15 HSC	14.42	15.02					
16 HS	14.87	16.50					
16 HSA	14.87	15.50				0.2	
16 HSB	15.33	15.96	5	25	5		12
16 HSC	15.79	16.50	٥		_		
18 HS	16.34	18.30		 			
18 HSA	16.34	17.06					
18 HSB	16.90	17.67	5	30	5	0.2	13
18 HSC	17.51	18.30			•	5.2	

¹⁾ Tested with pulse tp = 40 ms.

²⁾ Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature.







HS Series SILICON PLANAR ZENER DIODE

Characteristics at Tj = 25 °C

TYPE	YPE Zener Voltage)	Dynamic Resistance		Reverse Leakage Current (I _R at V _R)	
DO-35	Min. (V)	Max (V)	I _{ZT} (mA)	Ohm at I _{zT}	I _{zt} (mA)	I _R (uA) Max.	V _R (V)
20 HS	18.14	20.45					
20 HSA	18.14	18.96	1				
20 HSB	18.80	19.68	5	30	5	0.2	15
20 HSC	19.52	20.45	1				
22 HS	20.23	22.61					
22 HSA	20.23	21.08					
22 HSB	20.76	21.65	5	30	5	0.2	17
22 HSC	21.22	22.09	1				
22 HSD	21.68	22.61	1				
24 HS	22.26	24.81					
24 HSA	22.26	23.12	1				
24 HSB	22.75	23.73	5	35	5	0.2	19
24 HSC	23.29	24.27					
24 HSD	23.81	24.81					
27 HS	24.26	27.64					
27 HSA	24.26	25.52	1				
27 HSB	24.97	26.26	5	45	5	0.2	21
27 HSC	25.63	26.95					
27 HSD	26.29	27.64					
30 HS	26.99	30.51					
30 HSA	26.99	28.39					
30 HSB	27.70	29.13	5	55	5	0.2	23
30 HSC	28.36	29.82					
30 HSD	29.02	30.51					
33 HS	29.68	33.11					
33 HSA	29.68	31.22					
33 HSB	30.32	31.88	5	65	5	0.2	25
33 HSC	30.90	32.50					
33 HSD	31.49	33.11					
36 HS	32.14	35.77					
36 HSA	32.14	33.79	•				
36 HSB	32.79	34.49	5	75	5	0.2	27
36 HSC	33.40	35.13					
36 HSD	34.01	35.77					
39 HS	34.68	38.52					
39 HSA	34.68	36.47					
39 HSB	35.36	37.19	5	85	5	0.2	30
39 HSC	36.00	37.85					
39 HSD	36.63	38.52					

¹⁾ Tested with pulse tp = 40 ms.





²⁾ Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature.