

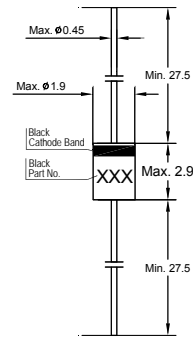
HZS Series

Silicon Epitaxial Planar Zener Diodes

For stabilized power supply

Features

- Low leakage, low zener impedance and maximum power dissipation of 500 mW are ideally suited for stabilized power supply, etc.
- Wide spectrum from 1.9 V through 38 V of Zener voltage provide flexible application.



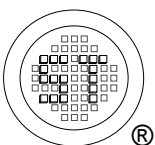
Glass Case DO-34
Dimensions in mm

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

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	500	mW
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 175	$^\circ\text{C}$

Characteristics at $T_a = 25^\circ\text{C}$ ($V_F = 1\text{ V Max. at } I_F = 100\text{ mA}$)

Type	Zener Voltage ¹⁾			Reverse Leakage Current		Dynamic Resistance	
	V_{ZT}		at I_{ZT}	I_R	at V_R	Z_{ZT}	at I_{ZT}
	Min. (V)	Max. (V)	(mA)	Max. (μA)	(V)	Max. (Ω)	(mA)
HZS2B1	1.9	2.1	5	5	0.5	100	5
HZS2B2	2	2.2	5	5	0.5	100	5
HZS2B3	2.1	2.3	5	5	0.5	100	5
HZS2C1	2.2	2.4	5	5	0.5	100	5
HZS2C2	2.3	2.5	5	5	0.5	100	5
HZS2C3	2.4	2.6	5	5	0.5	100	5
HZS3A1	2.5	2.7	5	5	0.5	100	5
HZS3A2	2.6	2.8	5	5	0.5	100	5
HZS3A3	2.7	2.9	5	5	0.5	100	5
HZS3B1	2.8	3	5	5	0.5	100	5
HZS3B2	2.9	3.1	5	5	0.5	100	5
HZS3B3	3	3.2	5	5	0.5	100	5
HZS3C1	3.1	3.3	5	5	0.5	100	5
HZS3C2	3.2	3.4	5	5	0.5	100	5
HZS3C3	3.3	3.5	5	5	0.5	100	5
HZS4A1	3.4	3.6	5	5	1	100	5
HZS4A2	3.5	3.7	5	5	1	100	5
HZS4A3	3.6	3.8	5	5	1	100	5
HZS4B1	3.7	3.9	5	5	1	100	5



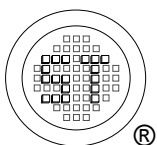
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HZS Series

Characteristics at $T_a = 25^\circ\text{C}$ ($V_F = 1\text{ V Max. at } I_F = 100\text{ mA}$)

Type	Zener Voltage ¹⁾			Reverse Leakage Current		Dynamic Resistance	
	V_{ZT}		at I_{ZT}	I_R	at V_R	Z_{ZT}	at I_{ZT}
	Min. (V)	Max. (V)	(mA)	Max. (μA)	(V)	Max. (Ω)	(mA)
HZS4B2	3.8	4	5	5	1	100	5
HZS4B3	3.9	4.1	5	5	1	100	5
HZS4C1	4	4.2	5	5	1	100	5
HZS4C2	4.1	4.3	5	5	1	100	5
HZS4C3	4.2	4.4	5	5	1	100	5
HZS5A1	4.3	4.5	5	5	1.5	100	5
HZS5A2	4.4	4.6	5	5	1.5	100	5
HZS5A3	4.5	4.7	5	5	1.5	100	5
HZS5B1	4.6	4.8	5	5	1.5	100	5
HZS5B2	4.7	4.9	5	5	1.5	100	5
HZS5B3	4.8	5	5	5	1.5	100	5
HZS5C1	4.9	5.1	5	5	1.5	100	5
HZS5C2	5	5.2	5	5	1.5	100	5
HZS5C3	5.1	5.3	5	5	1.5	100	5
HZS6A1	5.2	5.5	5	5	2	40	5
HZS6A2	5.3	5.6	5	5	2	40	5
HZS6A3	5.4	5.7	5	5	2	40	5
HZS6B1	5.5	5.8	5	5	2	40	5
HZS6B2	5.6	5.9	5	5	2	40	5
HZS6B3	5.7	6	5	5	2	40	5
HZS6C1	5.8	6.1	5	5	2	40	5
HZS6C2	6	6.3	5	5	2	40	5
HZS6C3	6.1	6.4	5	5	2	40	5
HZS7A1	6.3	6.6	5	1	3.5	15	5
HZS7A2	6.4	6.7	5	1	3.5	15	5
HZS7A3	6.6	6.9	5	1	3.5	15	5
HZS7B1	6.7	7	5	1	3.5	15	5
HZS7B2	6.9	7.2	5	1	3.5	15	5
HZS7B3	7	7.3	5	1	3.5	15	5
HZS7C1	7.2	7.6	5	1	3.5	15	5
HZS7C2	7.3	7.7	5	1	3.5	15	5
HZS7C3	7.5	7.9	5	1	3.5	15	5
HZS9A1	7.7	8.1	5	1	5	20	5
HZS9A2	7.9	8.3	5	1	5	20	5
HZS9A3	8.1	8.5	5	1	5	20	5
HZS9B1	8.3	8.7	5	1	5	20	5
HZS9B2	8.5	8.9	5	1	5	20	5
HZS9B3	8.7	9.1	5	1	5	20	5
HZS9C1	8.9	9.3	5	1	5	20	5
HZS9C2	9.1	9.5	5	1	5	20	5
HZS9C3	9.3	9.7	5	1	5	20	5
HZS11A1	9.5	9.9	5	1	7.5	25	5
HZS11A2	9.7	10.1	5	1	7.5	25	5
HZS11A3	9.9	10.3	5	1	7.5	25	5
HZS11B1	10.2	10.6	5	1	7.5	25	5



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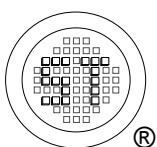


HZS Series

Characteristics at $T_a = 25^\circ\text{C}$ ($V_F = 1\text{ V Max. at } I_F = 100\text{ mA}$)

Type	Zener Voltage ¹⁾			Reverse Leakage Current		Dynamic Resistance	
	V_{ZT}		at I_{ZT}	I_R	at V_R	Z_{ZT}	at I_{ZT}
	Min. (V)	Max. (V)	(mA)	Max. (μA)	(V)	Max. (Ω)	(mA)
HZS11B2	10.4	10.8	5	1	7.5	25	5
HZS11B3	10.7	11.1	5	1	7.5	25	5
HZS11C1	10.9	11.3	5	1	7.5	25	5
HZS11C2	11.1	11.6	5	1	7.5	25	5
HZS11C3	11.4	11.9	5	1	7.5	25	5
HZS12A1	11.6	12.1	5	1	9.5	35	5
HZS12A2	11.9	12.4	5	1	9.5	35	5
HZS12A3	12.2	12.7	5	1	9.5	35	5
HZS12B1	12.4	12.9	5	1	9.5	35	5
HZS12B2	12.6	13.1	5	1	9.5	35	5
HZS12B3	12.9	13.4	5	1	9.5	35	5
HZS12C1	13.2	13.7	5	1	9.5	35	5
HZS12C2	13.5	14	5	1	9.5	35	5
HZS12C3	13.8	14.3	5	1	9.5	35	5
HZS151	14.1	14.7	5	1	11	40	5
HZS152	14.5	15.1	5	1	11	40	5
HZS153	14.9	15.5	5	1	11	40	5
HZS161	15.3	15.9	5	1	12	45	5
HZS162	15.7	16.5	5	1	12	45	5
HZS163	16.3	17.1	5	1	12	45	5
HZS181	16.9	17.7	5	1	13	55	5
HZS182	17.5	18.3	5	1	13	55	5
HZS183	18.1	19	5	1	13	55	5
HZS201	18.8	19.7	2	1	15	60	2
HZS202	19.5	20.4	2	1	15	60	2
HZS203	20.2	21.1	2	1	15	60	2
HZS221	20.9	21.9	2	1	17	65	2
HZS222	21.6	22.6	2	1	17	65	2
HZS223	22.3	23.3	2	1	17	65	2
HZS241	22.9	24	2	1	19	70	2
HZS242	23.6	24.7	2	1	19	70	2
HZS243	24.3	25.5	2	1	19	70	2
HZS271	25.2	26.6	2	1	21	80	2
HZS272	26.2	27.6	2	1	21	80	2
HZS273	27.2	28.6	2	1	21	80	2
HZS301	28.2	29.6	2	1	23	100	2
HZS302	29.2	30.6	2	1	23	100	2
HZS303	30.2	31.6	2	1	23	100	2
HZS331	31.2	32.6	2	1	25	120	2
HZS332	32.2	33.6	2	1	25	120	2
HZS333	33.2	34.6	2	1	25	120	2
HZS361	34.2	35.7	2	1	27	140	2
HZS362	35.3	36.8	2	1	27	140	2
HZS363	36.4	38	2	1	27	140	2

¹⁾ Tested with pulses $t_p = 20\text{ ms}$.



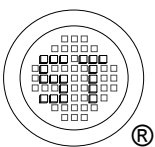
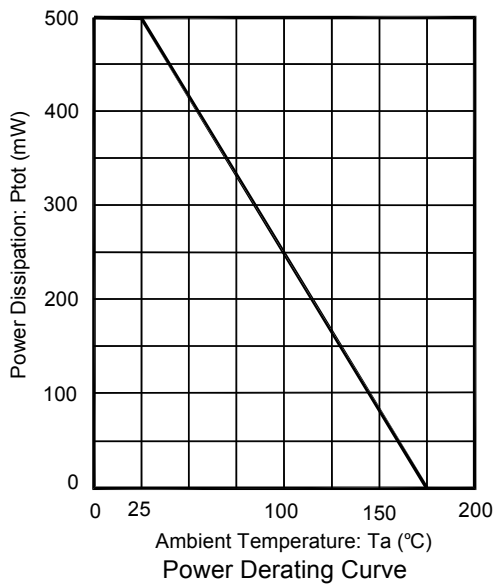
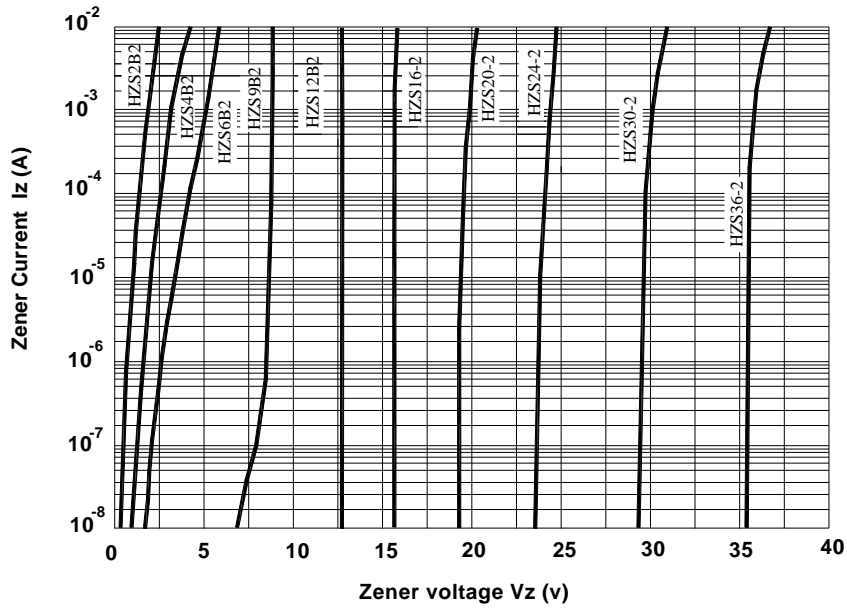
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Dated: 20/02/2016 Rev: 02

HZS Series

Zener current versus zener voltage



SEMTECH ELECTRONICS LTD.



ISO/TS 16949 : 2009
Certificate No. 160713000



ISO 14001 : 2004
Certificate No. 7116



ISO 9001 : 2008
Certificate No. 00719410



BS-OHSAS 18001 : 2007
Certificate No. 7116



IECQ QC 080000
Certificate No. PRC-HSPM-1483-1