

HZC Series

Silicon Epitaxial Planar Zener Diode for Surge Absorb

REJ03G1204-0200
(Previous: ADE-208-1436A)
Rev.2.00
Jul 04, 2005

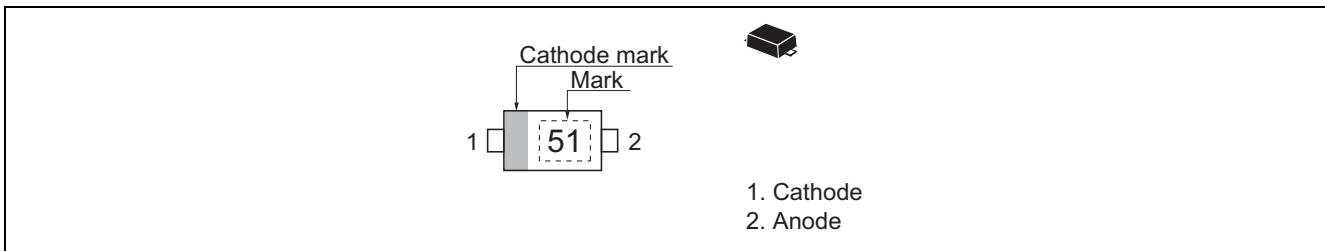
Features

- These diodes are delivered taped.
- Ultra small Flat Lead Package (UFP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Name	Package Code (Previous Code)
HZC Series	Let to Mark Code	UFP	PWSF0002ZA-A (UFP)

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

tem	Symbol	Value	Unit
Power dissipation	Pd *	150	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

Note: See Fig2.

Electrical Characteristics

(Ta = 25°C)

Type No.	Zener Voltage		Reverse Current		Dynamic Resistance		ESD-Capability *2	
	V _Z (V) *1		I _R (μA)	Test Condition	r _d (Ω)	Test Condition	— (kV) *2	
	Min	Max	Max	V _R (V)	Max	I _Z (mA)	Min	
HZC2.0	1.90	2.20	5	120.0	0.5	100	5	30
HZC2.2	2.10	2.40	5	120.0	0.7	100	5	30
HZC2.4	2.30	2.60	5	120.0	1.0	100	5	30
HZC2.7	2.50	2.90	5	120.0	1.0	110	5	30
HZC3.0	2.80	3.20	5	50.0	1.0	120	5	30
HZC3.3	3.10	3.50	5	20.0	1.0	130	5	30
HZC3.6	3.40	3.80	5	10.0	1.0	130	5	30
HZC3.9	3.70	4.10	5	10.0	1.0	130	5	30
HZC4.3	4.01	4.48	5	10.0	1.0	130	5	30
HZC4.7	4.42	4.90	5	10.0	1.0	130	5	30
HZC5.1	4.84	5.37	5	5.0	1.5	130	5	30
HZC5.6	5.31	5.92	5	5.0	2.5	80	5	30
HZC6.2	5.86	6.53	5	2.0	3.0	50	5	30
HZC6.8	6.47	7.14	5	1.0	3.5	30	5	30
HZC7.5	7.06	7.84	5	1.0	4.0	30	5	30
HZC8.2	7.76	8.64	5	0.5	5.0	30	5	30
HZC9.1	8.56	9.55	5	0.5	6.0	30	5	30
HZC10	9.45	10.55	5	0.5	7.0	30	5	30
HZC11	10.44	11.56	5	0.5	8.0	30	5	30
HZC12	11.42	12.60	5	0.5	9.0	35	5	30
HZC13	12.47	13.96	5	0.5	10.0	35	5	30
HZC15	13.84	15.52	5	0.5	11.0	40	5	30
HZC16	15.37	17.09	5	0.5	12.0	40	5	30
HZC18	16.94	19.03	5	0.5	13.0	45	5	30
HZC20	18.86	21.08	5	0.5	15.0	50	5	30
HZC22	20.88	23.17	5	0.5	17.0	55	5	30
HZC24	22.93	25.57	5	0.5	19.0	60	5	30
HZC27	25.10	28.90	2	0.5	21.0	70	2	30
HZC30	28.00	32.00	2	0.5	23.0	80	2	30
HZC33	31.00	35.00	2	0.5	25.0	80	2	25
HZC36	34.00	38.00	2	0.5	27.0	90	2	20

Notes: 1. Tested with pulse (Pw = 40 ms).

2. C = 150 pF, R = 330 Ω, Both forward and reverse direction 10 pulse
Failure criterion ; According to IR spec

Mark Code

Type No.	Mark No.
HZC2.0	20
HZC2.2	22
HZC2.4	24
HZC2.7	27
HZC3.0	30
HZC3.3	33
HZC3.6	36
HZC3.9	39
HZC4.3	43
HZC4.7	47
HZC5.1	51
HZC5.6	56
HZC6.2	62
HZC6.8	68
HZC7.5	75
HZC8.2	82
HZC9.1	91
HZC10	10 *
HZC11	11 *
HZC12	12 *
HZC13	13 *
HZC15	15 *
HZC16	16 *
HZC18	18 *
HZC20	20 *
HZC22	22 *
HZC24	24 *
HZC27	27 *
HZC30	30 *
HZC33	33 *
HZC36	36 *

Note: HZC10 To HZC36 has ■, on the right of Laser Mark.

Main Characteristic

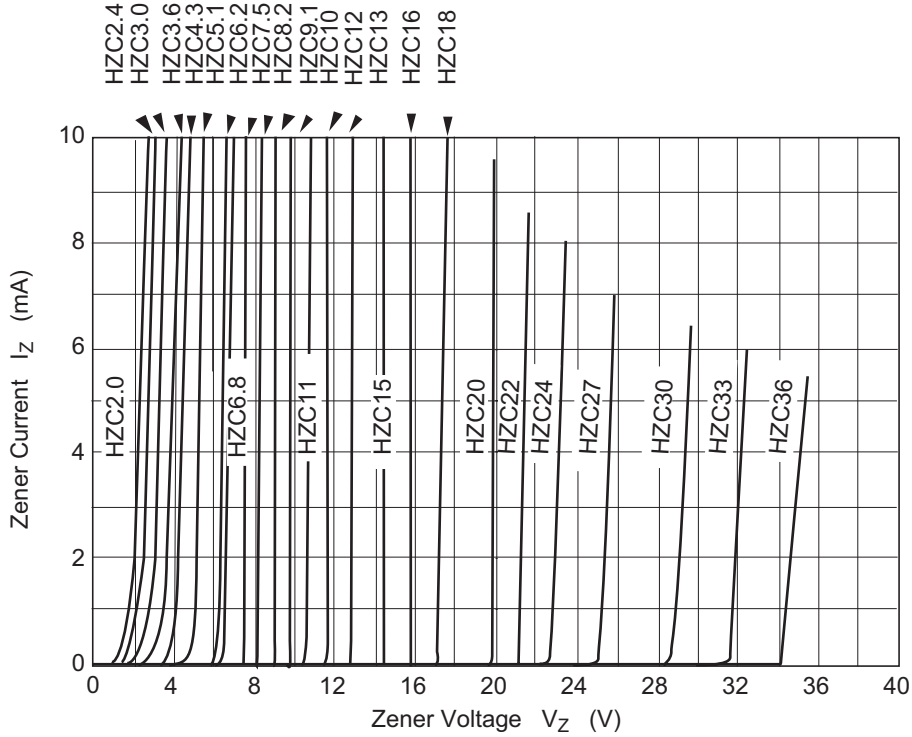


Fig.1 Zener current vs. Zener voltage

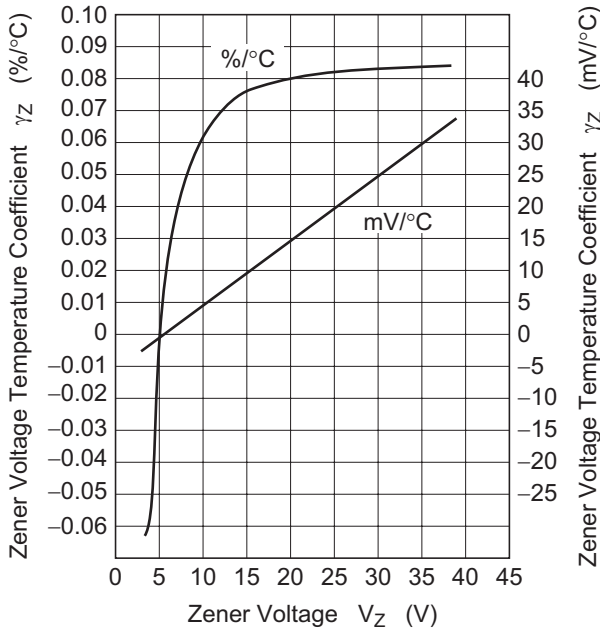


Fig.2 Temperature Coefficient vs. Zener voltage

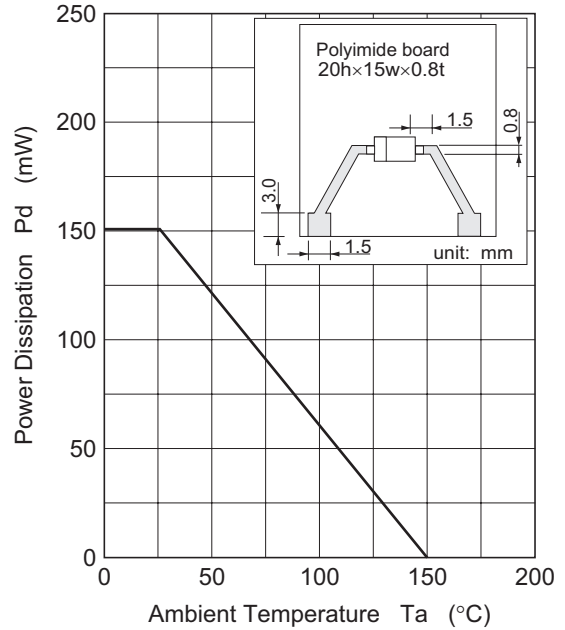
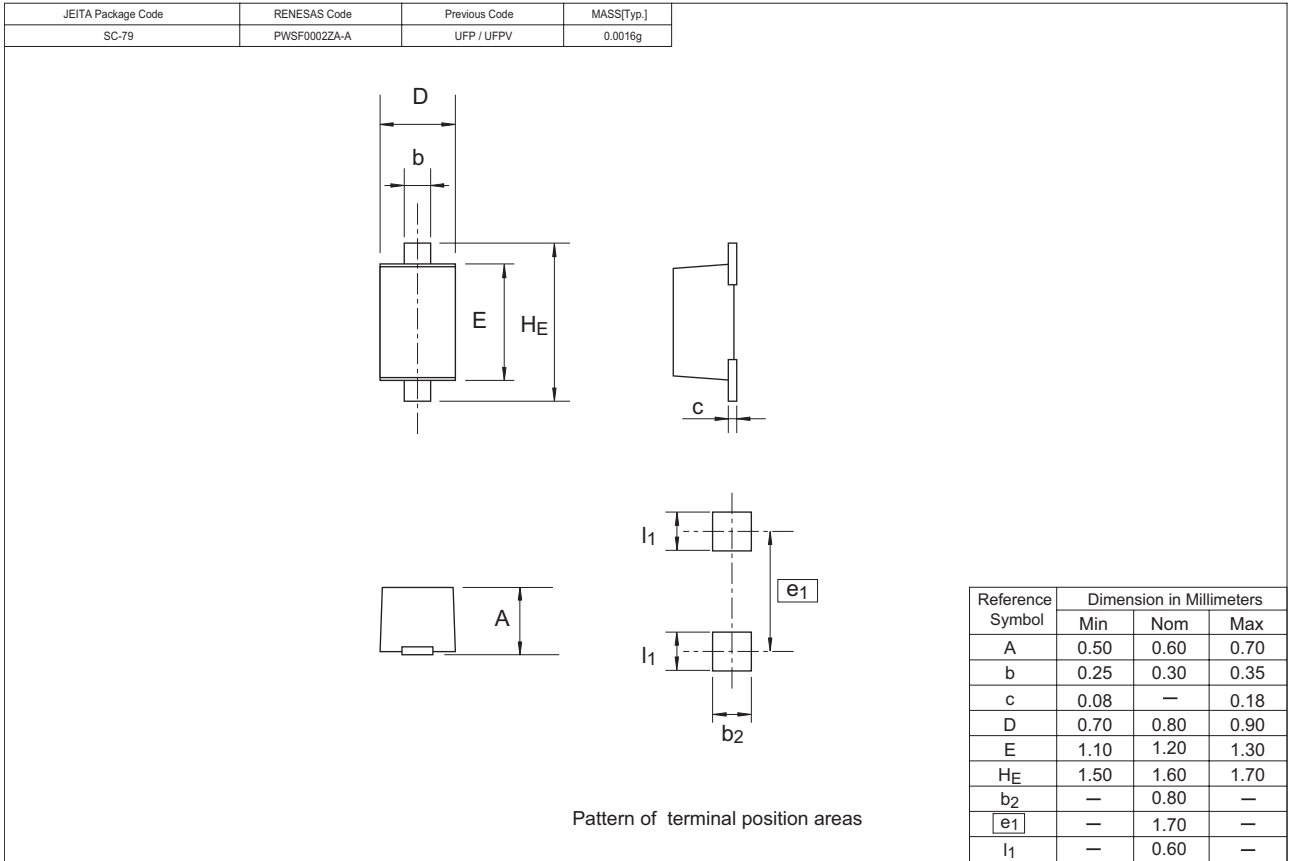


Fig.2 Power Dissipation vs. Ambient Temperature

Package Dimensions



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