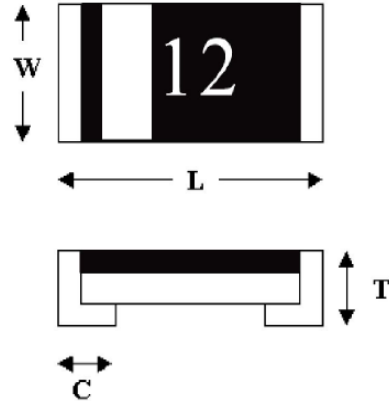


Zener Diodes
Power Dissipation - 500 mWatts
Features

- Silicon planar power zener diodes
- SMD chip pattern, available in various dimension
- Leadfree and RoHS compliance components

Mechanical Data

- Size: 1206
- Weight: approx. 10mg
- Marking: Zener voltage & cathode terminal

1206


Dimension/mm	1206
L	3.2±0.2
W	1.5±0.2
T	0.75±0.1
C	0.55±0.2

Package Outline Dimensions in Millimeters

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	Value	Unit
Power Dissipation	P _{tot}	500	mW
Repetitive Peak Forward Current	I _{FRM}	200	mA
Junction Temperature	T _j	150	°C
Thermal Resistance Junction to Ambient air	R _{θJA}	300	°C/W
Operating & Storage Temperature range	T _{opr, stg}	-55 to 150	°C
Forward Voltage at I _F =200mA	V _F	1.5 MAX	V

Zener Voltage Tolerance, =±5%

Notes: Valid provided that electrodes are kept at ambient temperature.

Rating and Characteristic Curves

HMZ0W502V0X5 THRU HMZ0W5075VX5

Part Number	Marking Code	Nominal Zener Voltage		Max Zener Impedance				Max Reverse Leakage Current	
		Vz @ IzT		ZzT @ IzT		Zzk @ IzK		Ir @ VR	
		Min V	Max V	Ω	mA	Ω	mA	μA	V
HMZ0W502V0X5	2	1.90	2.10	85	5	600	1	100	1
HMZ0W502V2X5	2V2	2.09	2.31	85	5	600	1	75	1
HMZ0W502V4X5	2V4	2.28	2.52	85	5	600	1	50	1
HMZ0W502V7X5	2V7	2.57	2.84	85	5	600	1	10	1
HMZ0W503V0X5	3	2.85	3.15	85	5	600	1	4	1
HMZ0W503V3X5	3V3	3.14	3.47	85	5	600	1	2	1
HMZ0W503V6X5	3V6	3.42	3.78	85	5	600	1	2	1
HMZ0W503V9X5	3V9	3.71	4.10	85	5	600	1	2	1
HMZ0W504V3X5	4V3	4.09	4.52	80	5	600	1	1	1
HMZ0W504V7X5	4V7	4.47	4.94	70	5	600	1	0.5	1
HMZ0W505V1X5	5V1	4.85	5.36	50	5	550	1	0.1	1
HMZ0W505V6X5	5V6	5.32	5.88	30	5	450	1	0.1	1
HMZ0W506V2X5	6V2	5.89	6.51	10	5	200	1	0.1	2
HMZ0W506V8X5	6V8	6.46	7.14	8	5	150	1	0.1	3
HMZ0W507V5X5	7V5	7.13	7.88	7	5	50	1	0.1	5
HMZ0W508V2X5	8V2	7.79	8.61	7	5	50	1	0.1	6.2
HMZ0W509V1X5	9V1	8.65	9.56	10	5	50	1	0.1	6.8
HMZ0W5010VX5	10	9.50	10.50	15	5	70	1	0.1	7.5
HMZ0W5011VX5	11	10.45	11.55	20	5	70	1	0.1	8.2
HMZ0W5012VX5	12	11.40	12.60	20	5	90	1	0.1	9.1
HMZ0W5013VX5	13	12.35	13.65	26	5	110	1	0.1	10
HMZ0W5014VX5	14	13.30	14.70	30	5	110	1	0.1	11
HMZ0W5015VX5	15	14.25	15.75	30	5	110	1	0.1	11
HMZ0W5016VX5	16	15.20	16.80	40	5	170	1	0.1	12
HMZ0W5018VX5	18	17.10	18.90	50	5	170	1	0.1	13
HMZ0W5020VX5	20	19.00	21.00	55	5	220	1	0.1	15
HMZ0W5022VX5	22	20.90	23.10	55	5	220	1	0.1	16
HMZ0W5024VX5	24	22.80	25.20	80	5	220	1	0.1	18
HMZ0W5027VX5	27	25.65	28.35	80	5	220	1	0.1	20
HMZ0W5030VX5	30	28.50	31.50	80	5	220	1	0.1	22
HMZ0W5033VX5	33	31.35	34.65	80	5	220	1	0.1	24
HMZ0W5036VX5	36	34.20	37.80	80	5	220	1	0.1	27
HMZ0W5039VX5	39	37.05	40.95	90	2.5	500	0.5	0.1	29.3
HMZ0W5043VX5	43	40.85	45.15	90	2.5	600	0.5	0.1	32.3
HMZ0W5047VX5	47	44.65	49.35	110	2.5	700	0.5	0.1	35.3
HMZ0W5051VX5	51	48.45	53.55	125	2.5	700	0.5	0.1	38.3
HMZ0W5056VX5	56	53.20	58.80	135	2.5	1000	0.5	0.1	42
HMZ0W5062VX5	62	58.90	65.10	150	2.5	1000	0.5	0.1	46.5
HMZ0W5068VX5	68	64.60	71.40	200	2.5	1000	0.5	0.1	51
HMZ0W5075VX5	75	71.25	78.75	250	2.5	1500	0.5	0.1	56.3

The curve above is for reference only.

HMZ0W50*X5-7-99-00-CC0015

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Rating and Characteristic Curves

HMZ0W502V0X5 THRU HMZ0W5075VX5



Figure 1. Forward current vs Forward Voltage

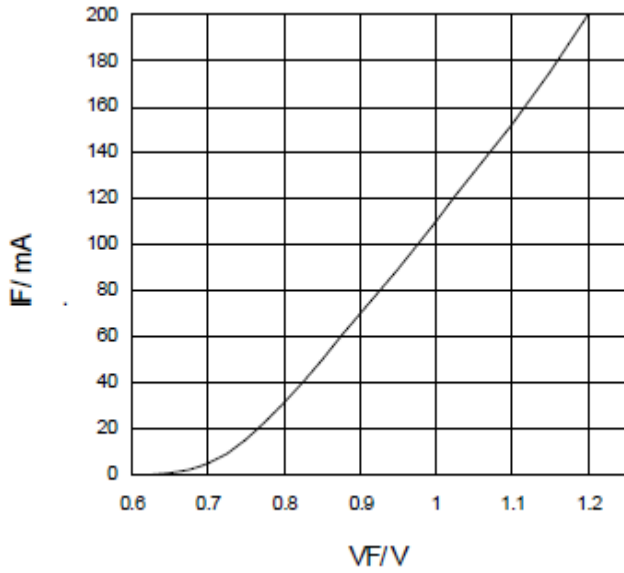
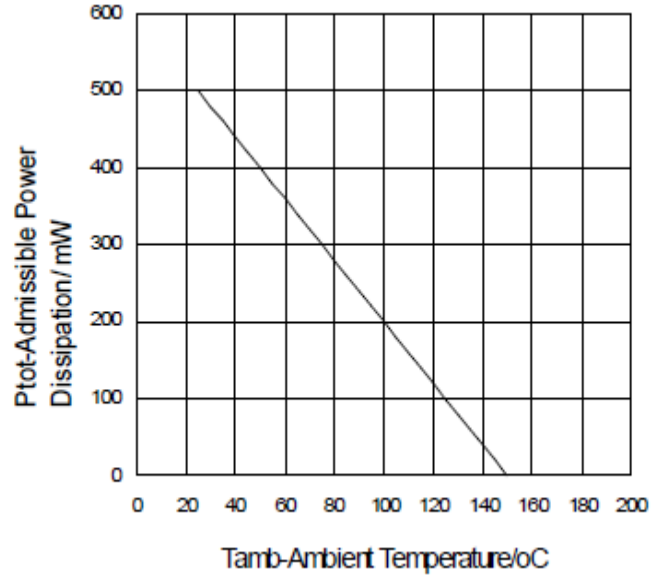


Figure 2. Power De-rating



The curve above is for reference only.

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