

### ZENER DIODES

POWER DISSIPATION: 500 mW

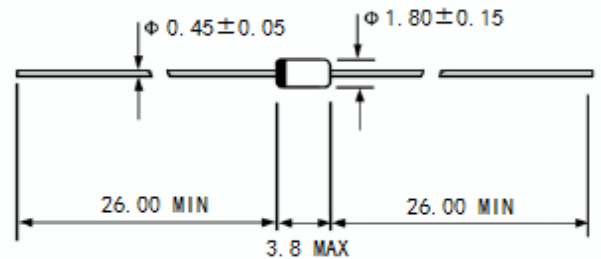
#### FEATURES

- ◇ Silicon planar power zener diodes
- ◇ Standard zener voltage tolerance is  $\pm 2\%$ . Other zener voltage and tolerances are available upon request.

#### MECHANICAL DATA

- ◇ Case: DO-35, glass case
- ◇ Terminals: solderable per MIL-STD-202, method 208
- ◇ Polarity: cathode band
- ◇ Marking: type number
- ◇ Approx. weight: 0.13 grams.

#### DO-35(GLASS)



Dimensions in millimeters

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

	SYMBOL	VALUE	UNIT
Zener current (see Table "Characteristics")			
Power dissipation at $T_{amb}=25^{\circ}\text{C}$	$P_{tot}$	500 <sup>(1)</sup>	mW
Junction temperature	$T_J$	175	°C
Storage temperature range	$T_s$	-55---+175	°C

	SYMBOL	MIN	TYP	MAX	UNIT
Thermal resistance junction to ambient	$R_{\theta JA}$	—	—	300 <sup>(1)</sup>	°C/W
Forward voltage at $I_F=100\text{mA}$	$V_F$	—	—	1.1	V

NOTES: (1) Valid provided that leads at a distance of 10 mm from case are kept at ambient temperature.

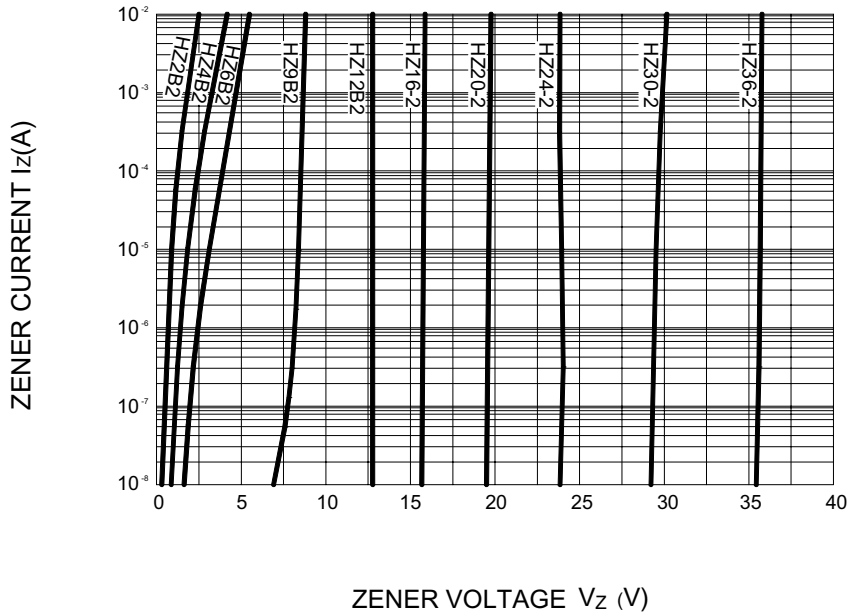
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# ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C)

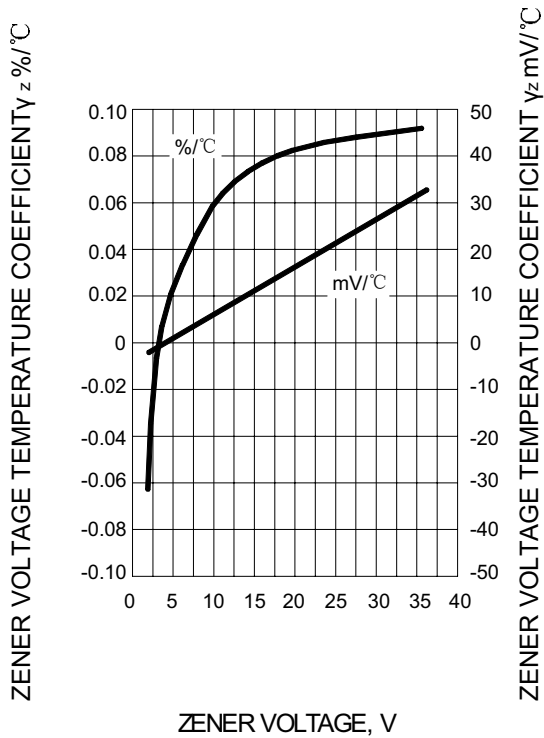
Suffix		1		2		3		Test condition	Dynamic resistance	Reverse current	
		Min	Max	Min	Max	Min	Max			I <sub>Z</sub>	r <sub>d</sub> @I <sub>Z</sub>
Type	V <sub>Z</sub>	V	V	V	V	V	V	mA	Ω	μA	V
HZ2	B	1.9	2.1	2.0	2.2	2.1	2.3	5	100	5	0.5
	C	2.2	2.4	2.3	2.5	2.4	2.6				
HZ3	A	2.5	2.7	2.6	2.8	2.7	2.9	5	100	5	0.5
	B	2.8	3.0	2.9	3.1	3.0	3.2				
	C	3.1	3.3	3.2	3.4	3.3	3.5				
HZ4	A	3.4	3.6	3.5	3.7	3.6	3.8	5	100	5	1.0
	B	3.7	3.9	3.8	4.0	3.9	4.1				
	C	4.0	4.2	4.1	4.3	4.2	4.4				
HZ5	A	4.3	4.5	4.4	4.6	4.5	4.7	5	100	5	1.5
	B	4.6	4.8	4.7	4.9	4.8	5.2				
	C	4.9	5.1	5.0	5.2	5.1	5.3				
HZ6	A	5.2	5.5	5.3	5.6	5.4	5.7	5	40	5	2.0
	B	5.5	5.8	5.6	5.9	5.7	6.0				
	C	5.8	6.1	6.0	6.3	6.1	6.4				
HZ7	A	6.3	6.6	6.4	6.7	6.6	6.9	5	15	1	3.5
	B	6.7	7.0	6.9	7.2	7.0	7.3				
	C	7.2	7.5	7.3	7.7	7.5	7.9				
HZ9	A	7.7	8.1	7.9	8.3	8.1	8.5	5	20	1	5.0
	B	8.3	8.7	8.5	8.9	8.7	9.1				
	C	8.9	9.3	9.1	9.5	9.3	9.7				
HZ11	A	9.5	9.9	9.7	10.1	9.9	10.3	5	25	1	7.5
	B	10.2	10.6	10.4	10.8	10.7	11.1				
	C	10.9	11.3	11.1	11.6	11.4	11.9				
HZ12	A	11.6	12.1	11.9	12.4	12.2	12.7	5	35	1	9.5
	B	12.4	12.9	12.6	13.1	12.9	13.4				
	C	13.2	13.7	13.5	14.0	13.8	14.3				
HZ15		14.1	14.7	14.5	15.1	14.9	15.5	5	40	1	11
HZ16		15.3	15.9	15.7	16.5	16.3	17.1	5	45	1	12
HZ18		16.9	17.7	17.5	18.3	18.1	19.0	5	55	1	13
HZ20		18.8	19.7	19.5	20.4	20.2	21.1	2	60	1	15
HZ22		20.9	21.9	21.6	22.6	22.3	23.3	2	65	1	17
HZ24		22.0	24.0	23.6	24.7	24.3	25.5	2	70	1	19
HZ27		25.2	26.6	26.2	27.6	27.2	28.6	2	80	1	21
HZ30		28.2	29.6	29.2	30.6	30.2	31.6	2	100	1	23
HZ33		31.2	32.6	32.2	33.6	33.2	34.6	2	120	1	25
HZ36		34.2	35.7	35.3	36.8	36.4	38.0	2	140	1	27

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**FIG.1 – BREAKDOWN CHARACTERISTICS**



**FIG.2 – TEMPERATURE COEFFICIENT**



**FIG.3 – ADMISSIBLE POWER DISSIPATION VERSUS AMBIENT TEMPERATURE**

