

## ZENER DIODE

PEAK PULSE POWER:500mW

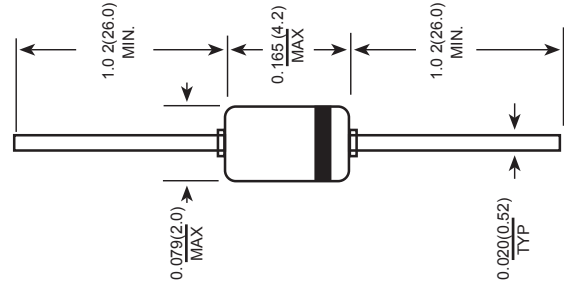
### Features

- Low Reverse Leakage
- Low Zener Impedance
- High Stability and High Reliability

### Mechanical Data


- Case: DO-35 Glass Case
- Polarity: Color band denotes cathode end
- Mounting Position: Any

### DO-35



## MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

Parameters	Symbol		Unit
Power Dissipation	Pd	500 <sup>1)</sup>	mW
	Tj	175	°C
Storage temperature range	Ts	-55-+175	°C

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

## Electrical Specification (TA=25°C unless otherwise specified)

TYPE		Zener Voltage		Reverse Current		Dynamic Resistance		
		Vz(V)		Test Condition	Ir(uA)	Test Condition	rd(Ω)	Test Condition
		Min.	Max.	Iz(mA)	Max.	Vr(V)	Max.	Iz(mA)
HZ2	A1	1.60	1.80	5.0	25.0	0.5	100	5.0
	A2	1.70	1.90					
	A3	1.80	2.00					
	B1	1.90	2.10					
	B2	2.00	2.20					
	B3	2.10	2.30					
	C1	2.20	2.40					
	C2	2.30	2.50					
HZ3	A1	2.50	2.70	5.0	5.0	0.5	100	5.0
	A2	2.60	2.80					
	A3	2.70	2.90					
	B1	2.80	3.00					
	B2	2.90	3.10					
	B3	3.00	3.20					
	C1	3.10	3.30					
	C2	3.20	3.40					
C3	3.30	3.50						

## RATINGS AND CHARACTERISTIC CURVES

Electrical Specification ( $T_A=25^\circ\text{C}$  unless otherwise specified)

TYPE		Zener Voltage		Reverse Current		Dynamic Resistance		
		Vz(V)		Test Condition	Ir(uA)	Test Condition	rd( $\Omega$ )	Test Condition
		Min.	Max.	Iz(mA)	Max.	Vr(V)	Max.	Iz(mA)
HZ4	A1	3.40	3.60	5.0	5.0	1.0	100	5.0
	A2	3.50	3.70					
	A3	3.60	3.80					
	B1	3.70	3.90					
	B2	3.80	4.00					
	B3	3.90	4.10					
	C1	4.00	4.20					
	C2	4.10	4.30					
	C3	4.20	4.40					
HZ5	A1	4.30	4.50	5.0	5.0	1.5	100	5.0
	A2	4.40	4.60					
	A3	4.50	4.70					
	B1	4.60	4.80					
	B2	4.70	4.90					
	B3	4.80	5.00					
	C1	4.90	5.10					
	C2	5.00	5.20					
	C3	5.10	5.30					
HZ6	A1	5.20	5.50	5.0	1.0	2.0	40	5.0
	A2	5.30	5.60					
	A3	5.40	5.70					
	B1	5.50	5.80					
	B2	5.60	5.90					
	B3	5.70	6.00					
	C1	5.80	6.10					
	C2	6.00	6.30					
	C3	6.10	6.40					
HZ7	A1	6.30	6.60	5.0	1.0	3.5	15	5.0
	A2	6.40	6.70					
	A3	6.60	6.90					
	B1	6.70	7.00					
	B2	6.90	7.20					
	B3	7.00	7.30					
	C1	7.20	7.60					
	C2	7.30	7.70					
	C3	7.50	7.90					

## RATINGS AND CHARACTERISTIC CURVES

Electrical Specification ( $T_A=25^{\circ}\text{C}$  unless otherwise specified)

TYPE		Zener Voltage			Reverse Current		Dynamic Resistance	
		Vz(V)		Test Condition	Ir(uA)	Test Condition	rd( $\Omega$ )	Test Condition
		Min.	Max.	Iz(mA)	Max.	Vr(V)	Max.	Iz(mA)
HZ9	A1	7.70	8.10	5.0	1	5.0	20	5.0
	A2	7.90	8.30					
	A3	8.10	8.50					
	B1	8.30	8.70					
	B2	8.50	8.90					
	B3	8.70	9.10					
	C1	8.90	9.30					
	C2	9.10	9.50					
	C3	9.30	9.70					
HZ11	A1	9.50	9.90	5.0	1	7.5	25	5.0
	A2	9.70	10.10					
	A3	9.90	10.30					
	B1	10.20	10.60					
	B2	10.40	10.80					
	B3	10.70	11.10					
	C1	10.90	11.30					
	C2	11.10	11.60					
	C3	11.40	11.90					
HZ12	A1	11.60	12.10	5.0	1	9.5	35	5.0
	A2	11.90	12.40					
	A3	12.20	12.70					
	B1	12.40	12.90					
	B2	12.60	13.10					
	B3	12.90	13.40					
	C1	13.20	13.70					
	C2	13.50	14.00					
	C3	13.80	14.30					
HZ15	-1	14.10	14.70	5.0	1	11.0	40	5.0
	-2	14.50	15.10					
	-3	14.90	15.50					
HZ16	-1	15.30	15.90	5.0	1	12.0	45	5.0
	-2	15.70	16.50					
	-3	16.30	17.10					
HZ18	-1	16.90	17.70	5.0	1	13.0	55	5.0
	-2	17.50	18.30					
	-3	18.10	19.00					
HZ20	-1	18.80	19.70	2.0	1	15.0	60	2.0
	-2	19.50	20.40					
	-3	20.20	21.10					

# RATINGS AND CHARACTERISTIC CURVES

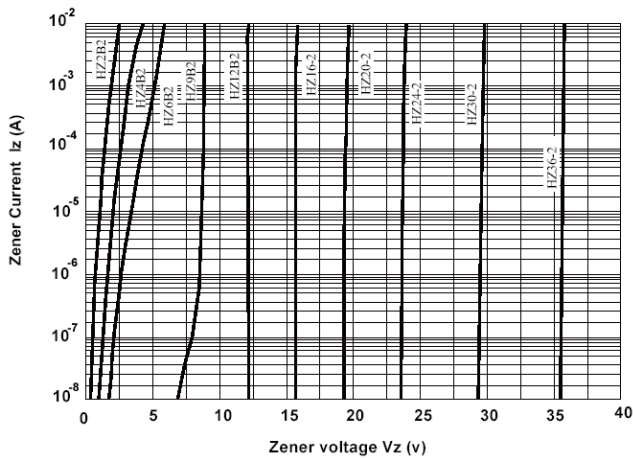
Electrical Specification ( $T_A=25^\circ\text{C}$  unless otherwise specified)

TYPE		Zener Voltage		Reverse Current		Dynamic Resistance		
		$V_z(\text{V})$		Test Condition	$I_r(\mu\text{A})$	Test Condition	$r_d(\Omega)$	
		Min.	Max.	$I_z(\text{mA})$	Max.	$V_r(\text{V})$	Max.	$I_z(\text{mA})$
HZ22	-1	20.90	21.90	2.0	1	17.0	65	2.0
	-2	21.60	22.60					
	-3	22.30	23.30					
HZ24	-1	22.90	24.00	2.0	1	19.0	70	2.0
	-2	23.60	24.70					
	-3	24.30	25.50					
HZ27	-1	25.20	26.60	2.0	1	21.0	80	2.0
	-2	26.20	27.60					
	-3	27.20	28.60					

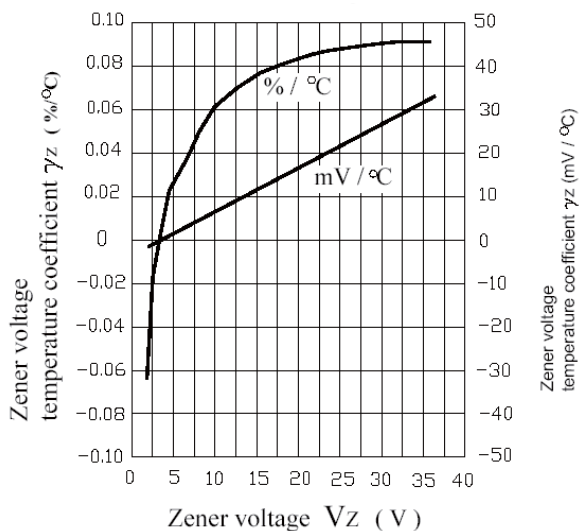
**Notes:**

- 1) Tested with pulses  $t_p = 20 \text{ ms}$ .
- 2) Tested with DC.
- 3)  $V_F(\text{Max})=1.20\text{V}@ I_F=100\text{mA}$

**Zener current versus zener voltage**



**Temperature Coefficient Vs. Zener voltage**



**Power dissipation Vs. Ambient temperature**

