

ZENER DIODE

PEAK PULSE POWER:500mW

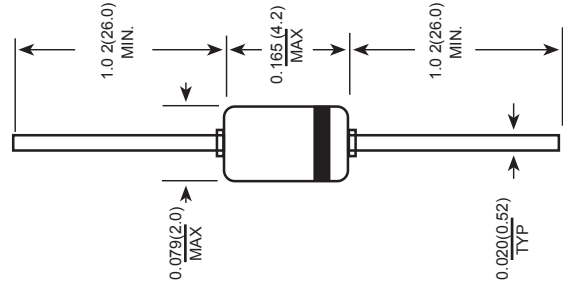
Features

- 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



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

Parameters	Symbol		Unit
Power Dissipation	Pd	500 ¹⁾	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(Ω)	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(Ω)	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					

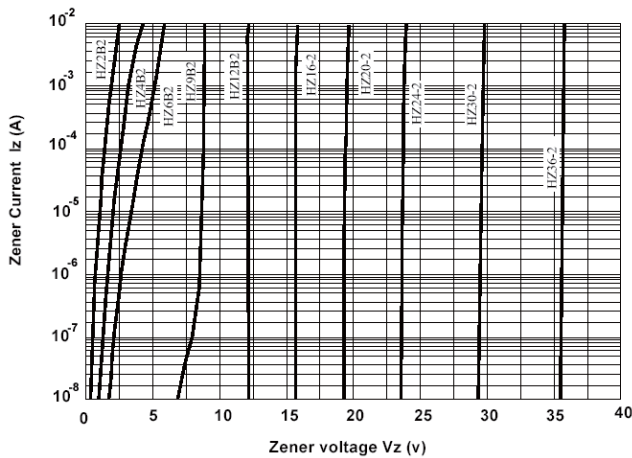
Electrical Specification ($T_A=25^\circ\text{C}$ unless otherwise specified)

TYPE		Zener Voltage		Reverse Current		Dynamic Resistance		
		$V_z(\text{V})$		Test Condition	$I_r(\mu\text{A})$	Test Condition	$r_d(\Omega)$	Test Condition
		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					

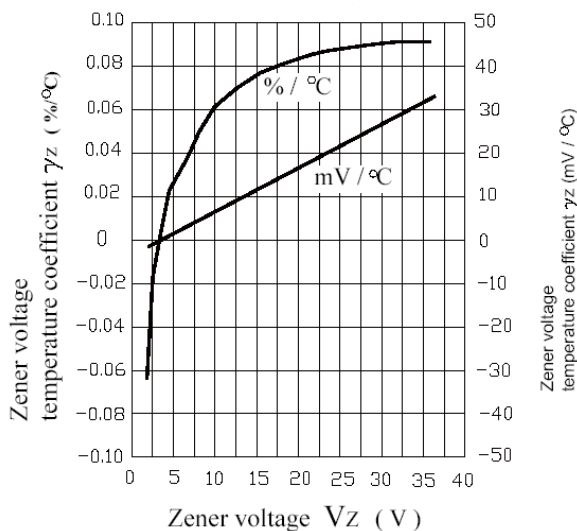
Notes:

- 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

