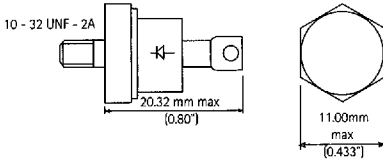


# HZ20 Series

## 20 WATT ZENER DIODE

### Mechanical Outline

#### DO4



### Mechanical Characteristics

#### Case:

Industry Standard DO-4, (DO-203 AA), 7/16" Hex. stud with 10-32 threads, welded, hermetically sealed metal and glass.

#### Thermal resistance:

10°C/W (Typical) junction to stud.

#### Polarity:

Std. Polarity is anode to stud. Reverse polarity indicated by suffix "R".

### Features

- Zener Voltage 3.9 to 200V
- Voltage tolerances; +/- 5%, +/- 10% and +/- 20%

### Maximum Ratings

Junction and Storage temperatures	-65°C to +175°C
DC Power Dissipation	20 Watts
Power Derating	80 mW/°C above 50°C
Forward Voltage @ 2.0 A	1.5 Volts

# HZ20 Series

Device	Nominal Zener Voltage $V_z @ I_{z1}$ ( )	Zener Test Current (I <sub>z1</sub> )	Max. Dynamic Impedance		Max DC Zener Current (I <sub>zm</sub> ) @ 75°C	Typical Temp Coeff.	Max Leakage Current I <sub>r</sub> @ V <sub>r</sub>	
	VOLTS	mA	Z <sub>st</sub> @1st Ohms	Z <sub>st</sub> @1mA (I <sub>zk</sub> ) Ohms	mA	%/°C	µA	Volts
HZ20V6.8	6.8	370	1.2	500	1,320	.040	150	5.2
HZ20V7.5	7.5	335	1.3	250	1180	.045	100	5.7
HZ20V8.2	8.2	305	1.5	250	1040	.048	50	6.2
HZ20V9.1	9.1	275	2.0	250	960	.051	25	6.9
HZ20V10	10	250	3	250	860	.055	25	7.6
HZ20V11	11	230	3	250	780	.060	10	8.4
HZ20V12	12	210	3	250	720	.065	10	9.1
HZ20V13	13	190	3	250	660	.065	10	9.9
HZ20V14	14	180	3	250	600	.070	10	10.5
HZ20V15	15	170	3	250	560	.070	10	11.4
HZ20V16	16	155	4	250	530	.070	10	12.2
HZ20V17	17	145	4	250	500	.075	10	13.0
HZ20V18	18	140	4	250	460	.075	10	13.7
HZ20V19	19	130	4	250	440	.075	10	14.0
HZ20V20	20	125	4	250	420	.075	10	15.2
HZ20V22	22	115	5	250	380	.080	10	16.7
HZ20V24	24	105	5	250	350	.080	10	18.2
HZ20V25	25	100	6	250	310	.080	10	18.2
HZ20V27	27	95	7	250	300	.085	10	20.6
HZ20V30	30	85	8	300	280	.085	10	22.8
HZ20V33	33	75	9	300	260	.085	10	25.1
HZ20V36	36	70	10	300	230	.085	10	27.4
HZ20V39	39	65	11	300	210	.090	10	29.7
HZ20V43	43	60	12	400	195	.090	10	32.7
HZ20V45	45	55	13	400	185	.090	10	33.0
HZ20V47	47	55	14	400	175	.090	10	35.8
HZ20V50	50	50	15	500	165	.090	10	36.0
HZ20V51	51	50	15	500	160	.090	10	38.8
HZ20V52	52	50	15	500	160	.090	10	39.0
HZ20V56	56	45	16	500	150	.090	10	42.6
HZ20V62	62	40	17	600	130	.090	10	47.1
HZ20V68	68	37	18	600	120	.090	10	51.7
HZ20V75	75	33	22	600	110	.090	10	56.0
HZ20V82	82	30	25	700	100	.090	10	62.2
HZ20V91	91	28	35	800	85	.090	10	69.2
HZ20V100	100	25	40	900	80	.090	10	76.0
HZ20V105	105	25	45	1000	75	.095	10	76.0
HZ20V110	110	23	55	1100	72	.095	10	83.6
HZ20V120	120	20	75	1200	67	.095	10	91.2
HZ20V130	130	19	100	1300	62	.095	10	98.8
HZ20V140	140	18	125	1400	58	.095	10	100.0
HZ20V150	150	17	175	1500	54	.095	10	114.0
HZ20V160	160	16	200	1600	50	.095	10	121.6
HZ20V175	175	14	250	1750	46	.095	10	135.0
HZ20V180	180	14	260	1850	45	.095	10	136.8
HZ20V200	200	12	300	2000	40	.100	10	152.0

ELECTRICAL CHARACTERISTICS @ 25°C Case Temperature