DIGITRON SEMICONDUCTORS

UZ706 – UZ790 SERIES
UZ110 – UZ140 SERIES

POWER ZENERS
3 WATT

MAXIMUM RATINGS

Zener Voltage, V_Z	6.8 to 400V
Continuous Current	See table
Surge Current (8.3 ms)	See table
Surge Power	See graph
Power	See lead temperature derating curve
Storage and Operating Temperature	-65 to +175°C

ELECTRICAL CHARACTERISTICS

TYPE*	ELECTRICAL SPECIFICATIONS @ 25°c							MAXIMUM RATINGS	
	Nominal Zener Voltage †	Test Current	Max. Zener Impedance §	Maximum Reverse Leakage Current			Typ. Temp. Coefficient	Maximum Continuous Current ★	Maximum Surge Current ‡
	V_Z @ I_{ZT}	I_{ZT}	Z_Z @ I_{ZT}	I_R @ V_R	+/- 5% V_R	+/- 10% V_R	T_C @ I_{ZT}	I_{ZM}	I_S
+/- 5% Tolerance	**Volts**	**mA**	**Ohms**	**µA**	**Volts**	**Volts**	**%/°C**	**mA**	**Amps**
UZ706	6.8	75	2	500	5.2	4.9	.04	440	10.0
UZ707	7.5	75	2	300	5.7	5.4	.04	400	8.0
UZ708	8.2	75	3	200	6.2	5.9	.05	360	7.0
UZ709	9.1	75	3	100	6.9	6.6	.05	330	6.0
UZ710	10.0	75	4	40	7.6	7.2	.06	300	5.0
UZ712	12	65	5	10	9.1	8.6	.07	250	4.0
UZ713	13	50	6	10	9.9	9.3	.07	230	4.0
UZ714	14	50	6	10	10.6	10.1	.07	210	4.0
UZ715	15	50	6	10	11.4	10.8	.07	200	3.0
UZ716	16	50	7	5	12.2	11.5	.07	185	3.0
UZ718	18	40	8	5	13.7	12.9	.08	170	2.0
UZ720	20	40	9	5	15.2	14.4	.08	150	2.0
UZ722	22	30	10	5	16.7	15.8	.08	135	2.0
UZ724	24	30	10	5	18.2	17.3	.08	125	1.5
UZ727	27	25	12	1	20.6	19.4	.09	110	1.5
UZ730	30	25	15	1	22.8	21.6	.090	100	1.5
UZ733	33	20	21	1	25.1	23.7	.090	90	1.2
UZ736	36	20	21	1	27.4	25.9	.090	85	1.0
UZ740	40	20	27	1	30.4	28.8	.095	75	1.0
UZ745	45	15	37	1	34.2	32.4	.095	65	0.8
UZ750	50	15	50	1	38.0	36.0	.095	60	0.8
UZ756	56	10	70	1	42.6	40.3	.095	55	0.7
UZ760	60	10	70	1	45.7	43.2	.095	50	0.6
UZ770	70	10	90	1	53.3	50.5	.095	45	0.6
UZ775	75	10	100	1	56.0	54.0	.095	40	0.5
UZ780	80	10	115	1	60.8	57.7	.095	35	0.4
UZ790	90	8.0	150	1	68.5	64.8	.095	30	0.4

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Rev. 20120730

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3 WATT

ELECTRICAL CHARACTERISTICS

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	Nominal Zener Voltage †	Test Current	Max. Zener Impedance §	Maximum Reverse Leakage Current			Typ. Temp. Coefficient	Maximum Continuous Current ★	Maximum Surge Current ‡
	V_Z @ I_{ZT}	I_{ZT}	Z_Z @ I_{ZT}	I_R @ V_R	+/- 5% V_R	+/- 10% V_R	T_C @ I_{ZT}	I_{ZM}	I_S
+/- 5% Tolerance	Volts	mA	Ohms	µA	Volts	Volts	%/°C	mA	Amps
UZ110	100	5.0	175	1	76.0	72.0	.100	30	0.4
UZ111	110	5.0	250	1	83.6	79.2	.100	25	0.3
UZ112	120	5.0	325	1	91.2	86.4	.100	25	0.2
UZ113	130	5.0	375	1	98.8	93.6	.100	20	0.20
UZ114	140	5.0	550	1	106	101	.100	20	0.20
UZ115	150	5.0	650	1	114	108	.100	20	0.20
UZ116	160	4.0	700	1	122	115	.100	20	0.15
UZ117	170	4.0	750	1	129	122	.100	18	0.15
UZ118	180	4.0	850	1	137	129	.100	18	0.10
UZ119	190	4.0	900	1	144	137	.100	15	0.10
UZ120	200	4.0	950	1	152	144	.100	15	0.10
UZ122	220	3.0	1100	1	167	158	.100	15	0.09
UZ124	240	3.0	1300	1	182	173	.105	12	0.09
UZ126	260	3.0	1500	1	198	187	.105	12	0.08
UZ128	280	3.0	1700	1	213	202	.105	10	0.08
UZ130	300	3.0	1900	1	228	216	.105	10	0.07
UZ132	320	2.0	2100	1	243	230	.105	9	0.07
UZ134	340	2.0	2400	1	258	245	.110	9	0.06
UZ136	360	2.0	2700	1	274	259	.110	8	0.06
UZ138	380	2.0	3000	1	289	274	.110	8	0.06
UZ140	400	2.0	3500	1	304	288	.110	7	0.06

- Specify 20% voltage tolerance by changing first numeral of type number from 7 to 9 or from 1 to 3. Specify 10% voltage tolerance by changing first numeral of type number from 7 to 8 or from 1 to 2.

† All zener voltages are measured with an automated test set using a 35 ms test time.
Longer or shorter test times will have a corresponding effect on the measured value due to heating effects.

§ Zener impedance is derived from the 60-cycle AC voltage created when AC current with RMS value of 10% of DC zener test current is superimposed on the test current.

★ Maximum current based on 3 watt rating,

‡ Figures shown are for a peak sinusoidal surge current of 8.3 ms duration using 60 cycle AC. The 8.3 ms square pulse rating is 71% of the value shown.

Available Non-RoHS (standard) or RoHS compliant (add PBF suffix).
Available as “HR” (high reliability) screened per MIL-PRF-19500, JANTX level. Add “HR” suffix to base part number.

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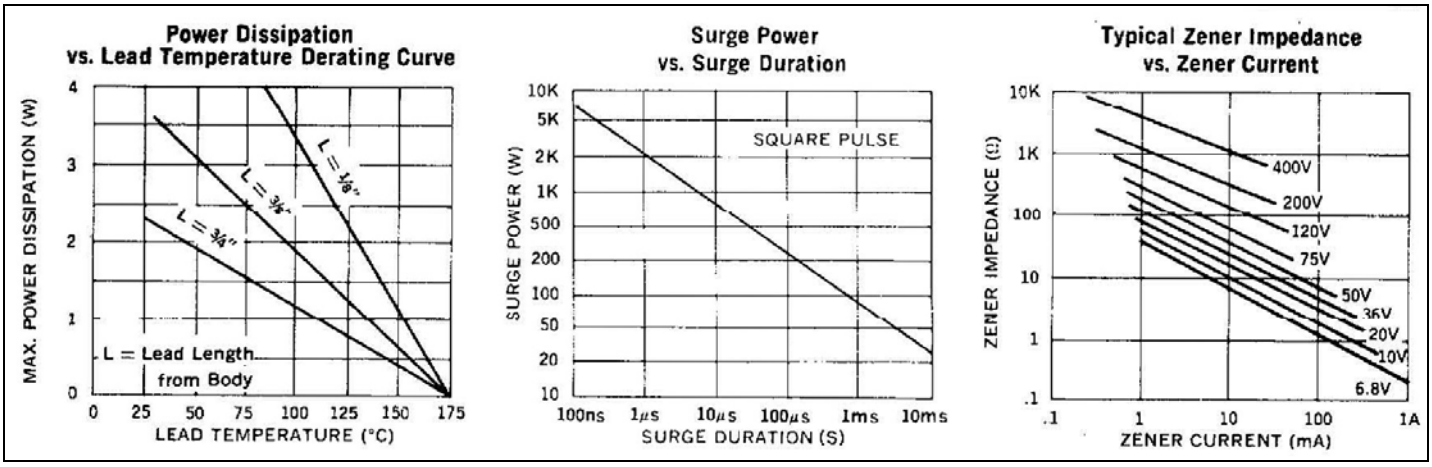
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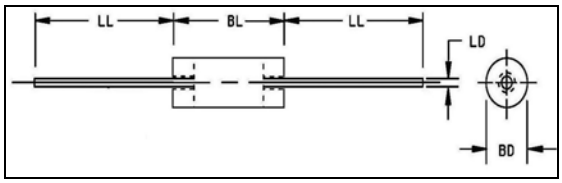
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POWER ZENERS
3 WATT



MECHANICAL CHARACTERISTICS

Case:	Glass
Polarity:	Cathode band



	Dimensions			
	Inches		Millimeters	
	Min	Max	Min	Max
BD	-	0.095	-	2.413
BL	-	0.250	-	6.350
LD	0.027	0.033	0.686	0.838
LL	1.000	-	25.400	-

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