

DIGITRON SEMICONDUCTORS

UZ806 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

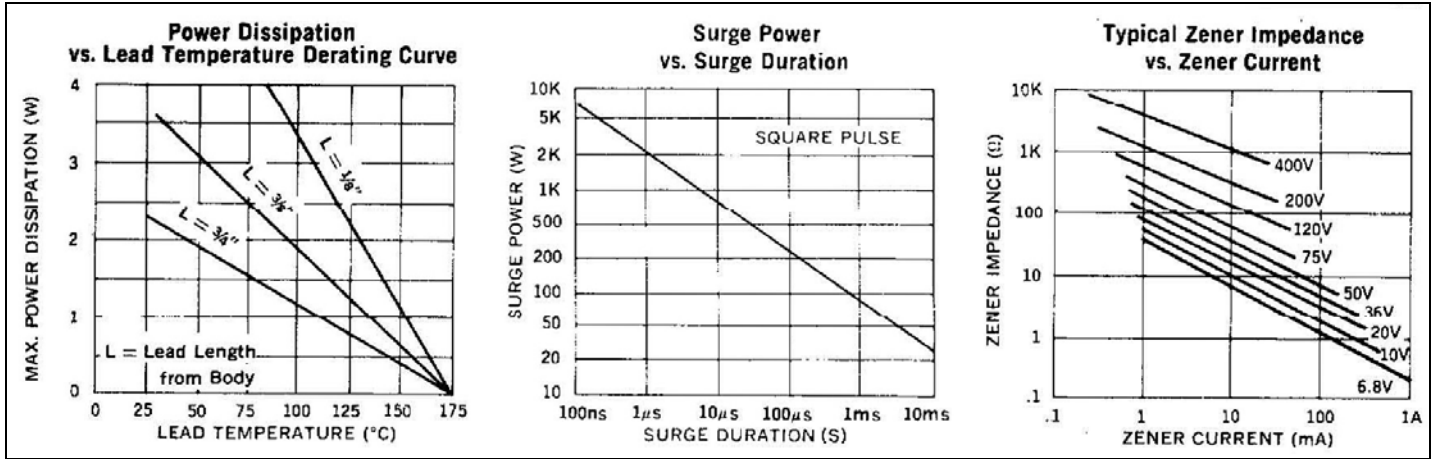
ELECTRICAL CHARACTERISTICS

TYPE*	ELECTRICAL SPECIFICATIONS @ 25°C						MAXIMUM RATINGS		
	Nominal Zener Voltage † $V_z @ I_{zT}$	Test Current I_{zT}	Max. Zener Impedance § $Z_z @ I_{zT}$	Maximum Reverse Leakage Current			Typ. Temp. Coefficient $T_c @ I_{zT}$	Maximum Continuous Current ★ I_{zM}	Maximum Surge Current ‡ I_s
				$I_R @ V_R$	±5% V_R	±10% V_R			
+/- 10% Tolerance	Volts	mA	Ohms	µA	Volts	Volts	%/°C	mA	Amps
UZ806	6.8	75	2	500	5.2	4.9	.04	440	10.0
UZ807	7.5	75	2	300	5.7	5.4	.04	400	8.0
UZ808	8.2	75	3	200	6.2	5.9	.05	360	7.0
UZ809	9.1	75	3	100	6.9	6.6	.05	330	6.0
UZ810	10.0	75	4	40	7.6	7.2	.06	300	5.0
UZ812	12	65	5	10	9.1	8.6	.07	250	4.0
UZ813	13	50	6	10	9.9	9.3	.07	230	4.0
UZ814	14	50	6	10	10.6	10.1	.07	210	4.0
UZ815	15	50	6	10	11.4	10.8	.07	200	3.0
UZ816	16	50	7	5	12.2	11.5	.07	185	3.0
UZ818	18	40	8	5	13.7	12.9	.08	170	2.0
UZ820	20	40	9	5	15.2	14.4	.08	150	2.0
UZ822	22	30	10	5	16.7	15.8	.08	135	2.0
UZ824	24	30	10	5	18.2	17.3	.08	125	1.5
UZ827	27	25	12	1	20.6	19.4	.09	110	1.5
UZ830	30	25	15	1	22.8	21.6	.090	100	1.5
UZ833	33	20	21	1	25.1	23.7	.090	90	1.2
UZ836	36	20	21	1	27.4	25.9	.090	85	1.0
UZ840	40	20	27	1	30.4	28.8	.095	75	1.0
UZ845	45	15	37	1	34.2	32.4	.095	65	0.8
UZ850	50	15	50	1	38.0	36.0	.095	60	0.8
UZ856	56	10	70	1	42.6	40.3	.095	55	0.7
UZ860	60	10	70	1	45.7	43.2	.095	50	0.6
UZ870	70	10	90	1	53.3	50.5	.095	45	0.6
UZ875	75	10	100	1	56.0	54.0	.095	40	0.5
UZ880	80	10	115	1	60.8	57.7	.095	35	0.4
UZ890	90	8.0	150	1	68.5	64.8	.095	30	0.4

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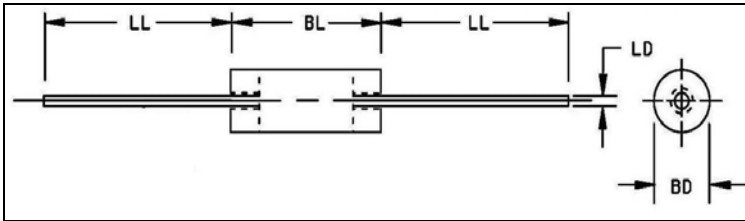
POWER ZENERS
3 WATT



- * Specify 20% voltage tolerance by changing first numeral of type number from 8 to 9.
- * Specify 5% voltage tolerance by changing first numeral of type number from 8 to 7.
- † 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.

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	0.029	0.031	0.737	0.787
LL	0.700	-	17.800	-

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.