

# DIGITRON SEMICONDUCTORS

1N4982-1N4996

5 WATT PLASTIC ZENER DIODES

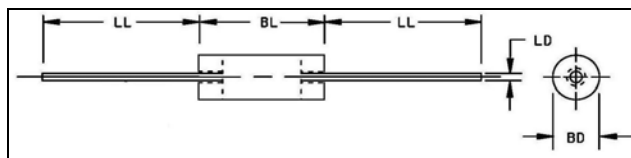
## MAXIMUM RATINGS

<b>Power Dissipation:</b>	5 Watts @ $T_L = 65^\circ\text{C}$ at 3/8" from body, derate linearly to zero @ $175^\circ\text{C}$ .
<b>Forward Voltage:</b>	1.50 V @ 1.0A
<b>Operating Temperature:</b>	$-65$ to $+175^\circ\text{C}$
<b>Storage Temperature:</b>	$-65$ to $+200^\circ\text{C}$

## ELECTRICAL CHARACTERISTICS

Type	Electrical Specifications @ $25^\circ\text{C}$							Maximum Ratings		
	Nominal Zener Voltage $V_Z @ I_{ZT}$	Test Current $I_{ZT}$	Maximum Zener Impedance		Regulation $\Delta BV \Delta VZ$	Maximum Reverse Leakage Current Voltage		Maximum Temperature Coeff. $T_C @ I_{ZT}$	Maximum Continuous Current $I_{ZM}$	Surge Current $I_{ZSM}$
			$Z_{ZT} @ I_{ZT}$	$Z_{VK} @ I_{ZK}$ 1mA		$I_B$	$V_R$			
Volts	mA	OHMS	OHMS	Volts	$\mu\text{A}$	Volts	%/ $^\circ\text{C}$	mA	Amps	
1N4982	100	12	110	800	8.0	2	76.0	.100	47.5	1.4
1N4983	110	12	125	1000	9.0	2	83.6	.100	43.0	1.2
1N4984	120	10	170	1150	10	2	91.2	.100	39.5	1.00
1N4985	130	10	190	1250	11	2	98.8	.105	36.6	0.80
1N4986	150	8	330	1500	13	2	114.0	.105	31.6	0.75
1N4987	160	8	350	1650	14	2	121.6	.105	29.4	0.70
1N4988	180	5	450	1750	16	2	136.8	.110	26.4	0.60
1N4989	200	5	500	1850	18	2	152	.110	23.6	0.50
1N4990	220	5	550	2000	19	2	167	.115	21.6	0.50
1N4991	240	5	650	2050	22	2	182	.115	19.8	0.40
1N4992	270	5	800	2100	25	2	206	.120	17.5	0.35
1N4993	300	4	950	2150	28	2	228	.120	15.6	0.30
1N4994	330	4	1175	220	32	2	251	.120	14.4	0.25
1N4995	360	3	1400	2300	35	2	274	.120	13.0	0.22
1N4996	390	3	1800	2500	40	2	297	.120	12.0	0.20

<b>Case:</b>	Plastic
<b>Marking:</b>	Body painted, alpha-numeric
<b>Polarity:</b>	Cathode band
<b>Weight:</b>	1.5 grams approximate



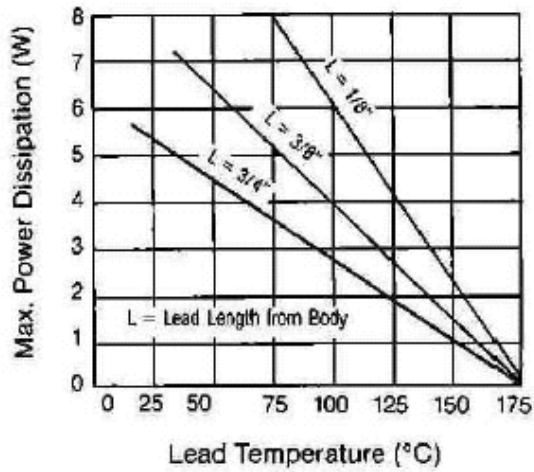
	Dimensions			
	1N4982-1N4996			
	Inches		Millimeters	
	Min	Max	Min	Max
<b>BD</b>	-	0.107	-	2.720
<b>BL</b>	-	0.205	-	5.207
<b>LD</b>	0.030	0.034	0.760	0.860
<b>LL</b>	1.000	-	25.400	-

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.

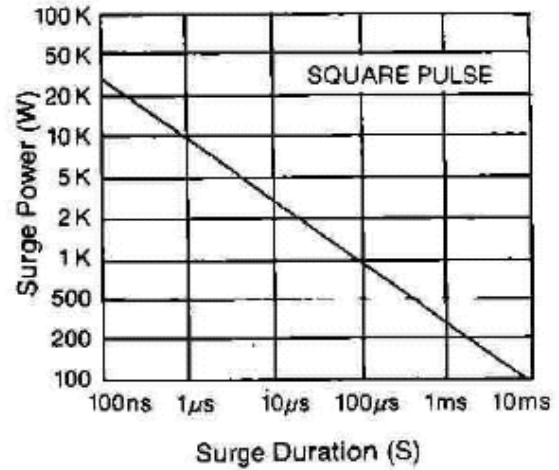
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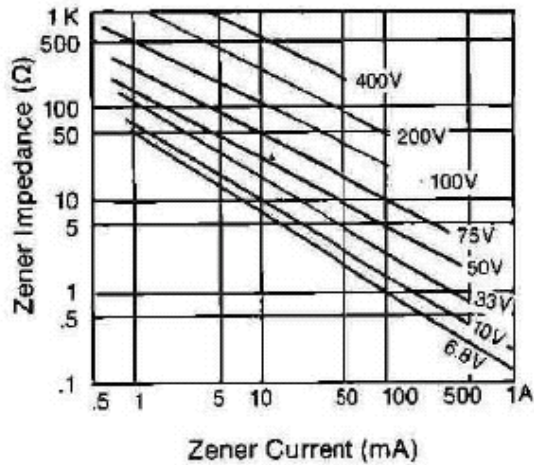
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**FIGURE 1**  
POWER DISSIPATION vs. LEAD  
TEMPERATURE DERATING CURVE



**FIGURE 2**  
SURGE POWER vs.  
SURGE DURATION



**FIGURE 3**  
TYPICAL ZENER IMPEDANCE vs.  
ZENER CURRENT