DIGITRON™ Semiconductors

High-reliability discrete products
and engineering services since 1977

1N5968-1N5969, 1N6632-1N6637

5 WATT ZENER DIODES

FEATURES

- Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.
- Available as non-RoHS (Sn/Pb plating), standard, and as RoHS by adding "-PBF" suffix.

MAXIMUM RATINGS

Operating Temperature:	-65 to +175°C
Storage Temperature:	-65 to +200°C
Power dissipation	5W @ T_L = 25°C, L = 3/8"
Power derating	33mW/°C above T_L = 25°C, L = 3/8"
Forward voltage	1.5V dc @ I_F = 1A dc
Thermal resistance	30°C/W maximum

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise specified)

Type	Electrical Specifications @ 25°C								Maximum Ratings	
	Nominal Zener Voltage V_Z @ I_{ZT}	Test Current I_{ZT}	Maximum Zener Impedance		Voltage Regulation	Maximum Reverse Leakage Current Voltage		Maximum Temperature Coeff. α_{VZ} @ I_{ZT}	Maximum Continuous Current I_{ZM}	Surge Current I_{ZSM}
			Z_{ZT} @ I_{ZT}	Z_{ZK}^* @ I_{ZK} = 1mA	$\triangle V_Z$	I_R	V_R			
	Volts	mA	OHMS	OHMS	Volts	µA	Volts	%/°C	mA	Amps
1N6632	3.3	380	3.0	500	0.90	300	1.0	-.075	1440	20.0
1N6633	3.6	350	2.5	500	0.80	250	1.0	-.070	1320	18.7
1N6634	3.9	320	2.0	500	0.75	175	1.0	-.060	1220	17.6
1N6635	4.3	290	2.0	500	0.70	25	1.0	-.050	1100	16.4
1N6636	4.7	260	2.0	450	0.60	20	1.0	±.025	1010	15.3
1N6637	5.1	240	1.5	400	0.50	5	1.0	±.030	930	14.4
1N5968	5.6	220	1.0	400	0.4	5000	4.28	.04	865	20
1N5969	6.2	220	1.0	1000	0.5	1000	4.74	.04	765	20

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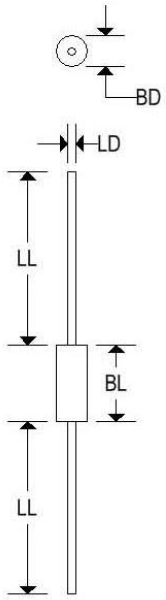
MECHANICAL CHARACTERISTICS

Case:	Digi F
Marking:	Body painted, alpha-numeric
Polarity:	Cathode band



	Digi F			
	Inches		Millimeters	
	Min	Max	Min	Max
BD	-	0.135	-	3.429
BL	-	0.180	-	4.572
LD	0.038	0.042	0.965	1.067
LL	1.000	-	25.400	-

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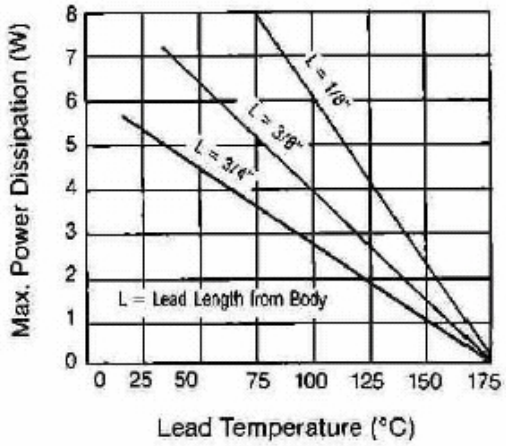

FIGURE 1
POWER DISSIPATION vs. LEAD TEMPERATURE DERATING CURVE

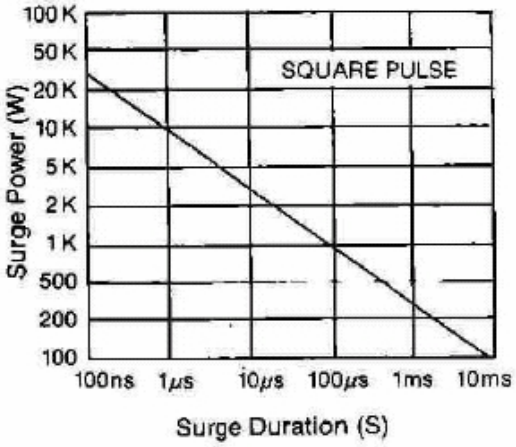

FIGURE 2
SURGE POWER vs. SURGE DURATION

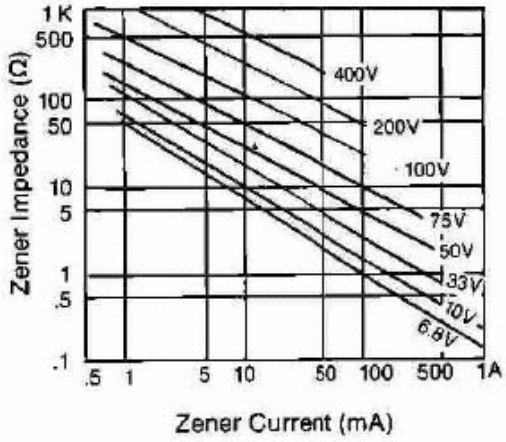

FIGURE 3
TYPICAL ZENER IMPEDANCE vs. ZENER CURRENT

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Rev. 20091224