

# DIGITRON SEMICONDUCTORS

1N6616-1N6619

ULTRA FAST RECOVERY RECTIFIERS

Operating temperature range: -65° to +175°C  
Storage temperature range: -65° to +200°C

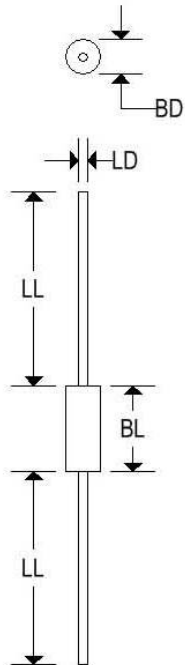
## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Part number	Working reverse voltage	Average rectified current		Reverse current @ $V_{RWM}$		Forward voltage		1 cycle surge current	Repetitive surge current	Reverse recovery time <sup>(3)</sup>	Thermal impedance			Junction capacitance
								$t_p = 8.3ms$						@ 50Vdc @ 1kHz
	$V_{RWM}$	$I_O$		$I_R$		$V_F$		$I_{FSM}$	$I_{FRM}$	$t_{rr}$	$\theta_{J-L}$			$C_J$
		55°C <sup>(1)</sup>	100°C <sup>(2)</sup>	25°C	100°C	25°C		25°C	25°C	25°C	L = 0.125"	L = 0.375"	L = 0.500"	25°C
Volts	Amps	Amps	$\mu A$	$\mu A$	Volts	Amps	Amps	Amps	Amps	ns	°C/W	°C/W	°C/W	pF
1N6616	400	3.0	2.0	1.0	20	1.7	3.00	100	20	70	9	20	25	35
1N6617	600	3.0	2.0	1.0	20	1.7	3.00	100	20	70	9	20	25	35
1N6618	800	3.0	2.0	1.0	20	1.7	3.00	100	20	70	9	20	25	35
1N6619	1000	3.0	2.0	1.0	20	1.7	3.00	100	20	70	9	20	25	35

Note 1:  $T_L = 55^\circ C, L = 0.375"$   
Note 2:  $T_L = 100^\circ C, L = 0.375"$   
Note 3:  $I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A$

## MECHANICAL CHARACTERISTICS

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



	Digi G			
	Inches		Millimeters	
	Min	Max	Min	Max
BD	0.135	0.185	3.430	4.700
BL	0.140	0.195	3.560	4.950
LD	0.036	0.042	0.910	1.067
LL	1.000	1.300	25.400	33.020

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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