

High-reliability discrete products and engineering services since 1977

# 1N5610-1N5613

# 1500W TRANSIENT VOLTAGE SUPPRESSOR

## **FEATURES:**

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

## **MAXIMUM RATINGS**

Zener Voltage:	1N5610	1N5611	1N5612	1N5613
	See electrical specifications			
Forward Surge Current:	200A	200A	200A	200A
Zener Surge Current @ 25°C:	32.0A	24.0A	19.0A	5.7A
Surge Current @ 150°C:	5.5A	4.8A	3.2A	1.0A
Surge Power:		See g	graph	
Storage and Operating Temperature:		-65°C to	+175°C	

# **ELECTRICAL CHARACTERISTICS**

Туре	Min. Zener Voltage § Vz @ 1mA		er Voltage † @ Is	Leakage	everse Current VR	Max. Forward Voltage ∓ @ 100 Amps	Typical Temperature Coefficient
	Volts	Volts	Amps	μΑ	Volts	Volts	%/°C
1N5610	33.0	47.5	32.0	5.0	30.5	4.8	.093
1N5611	43.7	63.5	24.0	5.0	40.3	4.8	.094
1N5612	54.0	78.5	19.0	5.0	49.0	4.8	.096
1N5613	191.0	265.0	5.7	5.0	175.0	4.8	.100

Notes: § Duration of applied current ≤300ms, duty cycle ≤ 2%.

 $<sup>^\</sup>dagger\,$  Utilizing a pulse which decays exponentially to 50% of the peak value in 1ms.

See graph entitled "Pulse Waveform."

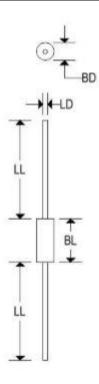
 $<sup>\</sup>ensuremath{\mathsf{\mp}}$  Peak Sinusoidal surge current of 8.3ms duration, non-repetitive.



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# MECHANICAL CHARACTERISTICS

Case	DO-201
Marking	Alpha-numeric
Polarity	Cathode band



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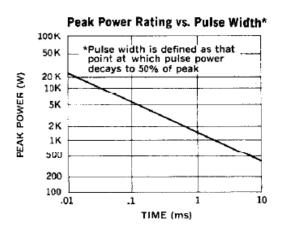
	DO-201				
- 1	Inches		Millimeters		
	Min	Max	Min	Max	
BD	0.190	0.250	4.826	6.350	
BL	0.285	0.375	7.239	9.525	
LD	0.038	0.042	0.965	1.067	
LL	1.000	335	25.400	- 25	

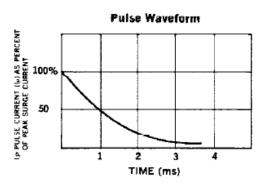


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# Peak Power Rating\* vs. Ambient Temperature 2000 \*1 Millisecond Pulse 1500 1500 25 25 75 125 175 AMBIENT TEMPERATURE (°C)