

# 1N5610 - 1N5613

# UNI-DIRECTIONAL TRANSIENT VOLTAGE SUPPRESSOR

$V_{WM}$  : 30.5 -175 Volts

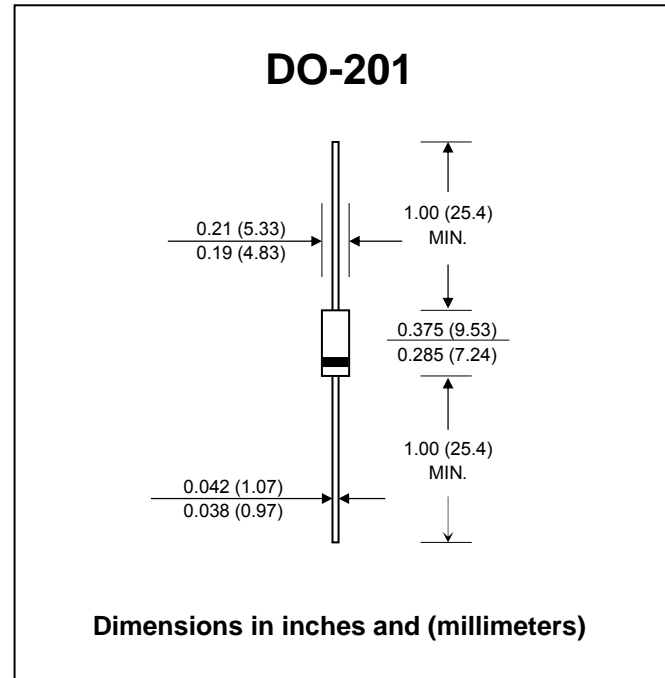
$P_{PP}$  : 1500 Watts

## FEATURES :

- \* Peak pulse power: 1500W at 10/1000  $\mu$ s
- \* Extensive rang in Working Peak "Standoff" Voltage ( $V_{WM}$ ) from 30.5 to 175 V
- \* High surge current
- \* Excellent robust construction
- \* Pb / RoHS Free

## MECHANICAL DATA

- \* Case : DO-201 Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity : Color band denotes cathode.
- \* Mounting position : Any
- \* Weight : 0.93 grams



## MAXIMUM RATINGS ( Rating at 25 °C ambient temperature unless otherwise specified)

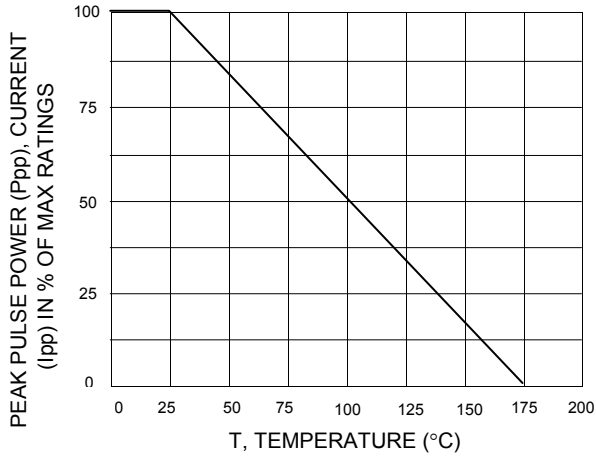
Rating	Symbol	Value	Unit
Peak Pulse Power at Ta = 25 °C, 10/1000 $\mu$ s	$P_{PP}$	1500	W
Steady State Power at Ta = 25 °C	$P_D$	3.0	W
Operating and Storage Temperature Range	$T_J, T_{STG}$	- 55 to + 175	°C

## ELECTRICAL CHARACTERISTICS ( Rating at 25 °C ambient temperature unless otherwise specified)

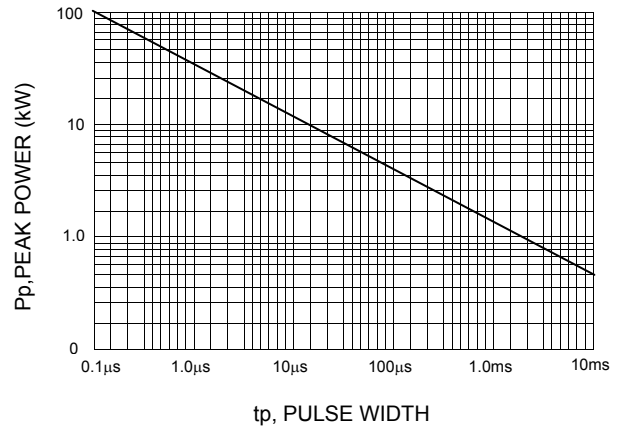
Type No.	Minimum Breakdown Voltage at $I_{(BR)}$		Working Peak Voltage $V_{WM}$ (V)	Maximum Leakage Current @ $V_{WM}$ $I_D$ ( $\mu$ A)	Maximum Clamping Voltage @ $I_{PP}$ $V_C$ (V)	Maximum Reverse Current $I_{PP}$ (A)	Maximum Temperature Co-efficient of $V_{(BR)}$ of $V_{(BR)}$ (% / °C)
	$V_{(BR)}$	$I_{(BR)}$					
	Min.	(mA)					
1N5610	33.0	1.0	30.5	5	47.6	32	0.093
1N5611	43.7	1.0	40.3	5	63.5	24	0.094
1N5612	54.0	1.0	49.0	5	78.5	19	0.096
1N5613	191	1.0	175	5	265	5.7	0.100

## RATING AND CHARACTERISTIC CURVES ( 1N5610 - 1N5613 )

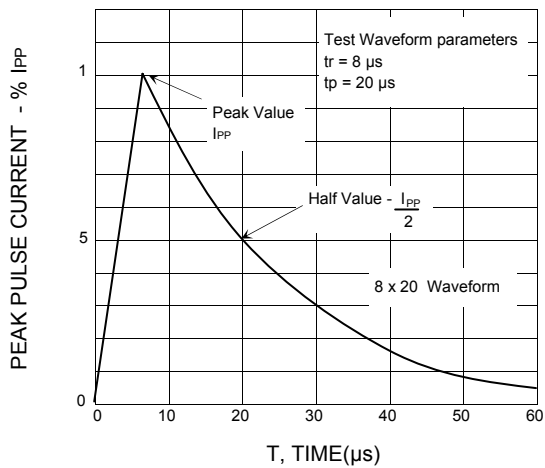
**FIG.1 - DRATING CURVE**



**FIG.2 - NON-REPETITIVE PEAK PULSE POWER RATING CURVE**



**FIG.3 - PULSE WAVEFORM**



**FIG.4 - PULSE WAVEFORM FOR EXPONENTIAL SURGE FOR 10/1000 µs**

