

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

1500 Watts for 10/1000µs with repetition rate of 0.01% or less* at lead temperature (T _L) 25°C	
Operating and Storage Temperatures	-65 to +175°C
Thermal Resistance	50°C/W junction to lead at 0.375" from body or 110°C/W junction to ambient when mounted on FR4 PC board with 4 mm ² copper pads and track width 1mm, length 25mm
DC Power Dissipation *	1 Watt @ T _L = 25°C 3/8 from body
Forward Surge Current	200 Amps for 8.3 ms half-sine wave @ T _A = 25°C
Solder Temperatures	260°C for 10 s (maximum)

* TVS devices are not typically used for dc power dissipation and are instead operated at or less than their rated standoff voltage (V_{WM}) except for transients that briefly drive the device into avalanche breakdown (V_{BR} to V_C region).

ELECTRICAL CHARACTERISTICS

Type (note 1)	Minimum Breakdown Voltage	Test Current	Rated Standoff Voltage	Maximum (RMS) Reverse Voltage	Maximum Standby Current	Maximum Peak Reverse Voltage	Maximum Peak Pulse Current	Maximum Temperature Coefficient
	V _(BR) @ I _(BR)	I _(BR)	V _{WM}	V _{WM(RMS)}	I _D @ V _{WM}	V _C @ I _{PP}	I _{PP}	αV _(BR)
	V	mA	V	V	µA	V	A	%/°C
1N5555	33.0	1.0	30.5	21.5	5	47.5	32	+0.093
1N5556	43.7	1.0	40.3	28.5	5	63.5	24	+0.094
1N5557	54.0	1.0	49.0	34.5	5	78.5	19	+0.096
1N5558	191.0	1.0	175	124.0	5	265.0	5.7	+0.100

Note 1: A TVS is normally selected according to the rated "Standoff Voltage" V_{WM} that should be equal to or greater than the dc or continuous peak operating voltage level.

SYMBOLS AND DEFINITIONS

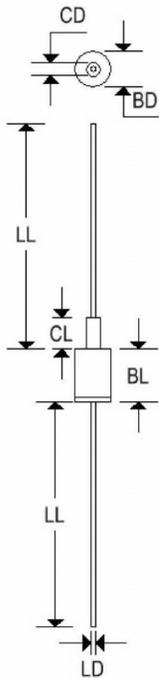
V _{WM}	Standoff Voltage: Applied Reverse Voltage to assure a nonconductive condition
V _(BR)	Breakdown Voltage: This is the Breakdown Voltage the device will exhibit at 25°C
V _C	Maximum Clamping Voltage: The maximum peak voltage appearing across the TVS when subjected to the peak pulse current in a one millisecond time interval. The peak pulse voltage is the combination of voltage rise due to both the series resistance and thermal rise and positive temperature coefficient (αV _(BR))
I _{PP}	Peak Pulse Current: The peak current during the impulse
P _{PP}	Peak Pulse Power: The pulse power as determined by the product of V _C and I _{PP}
I _D	Standby Current: The current at the standoff voltage (V _{WM})
I _(BR)	Breakdown Current: The current used for measuring breakdown voltage (V _(BR))

1N5555-1N5558

Transient Voltage Suppressor
1500 Watt

MECHANICAL CHARACTERISTICS

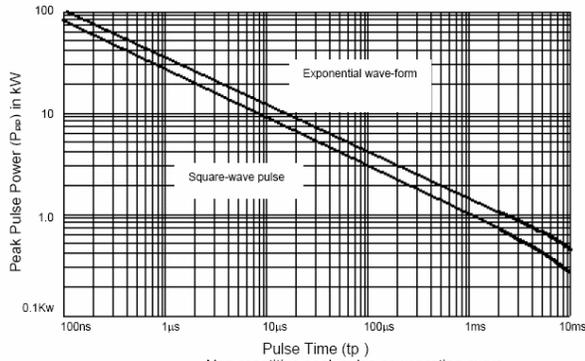
Case	DO-13
Marking	Alpha-numeric, body painted
Polarity	Cathode band



	DO-13			
	Inches		Millimeters	
	Min	Max	Min	Max
BD	-	0.235	-	5.970
BL	0.315	0.350	8.001	8.890
LD	0.027	0.035	0.686	0.762
LL	1.250	-	31.750	-
CD	-	0.100	-	2.540
CL	-	0.210	-	5.334

1N5555-1N5558

Transient Voltage Suppressor 1500 Watt



Non-repetitive peak pulse power rating curve
NOTE: Peak power defined as peak voltage times peak current

