New Jersey Semi-Conductor Products, Inc.

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TRANSIENT VOLTAGE SUPPRESSORS

TVS305-TVS430
TVS505-TVS528

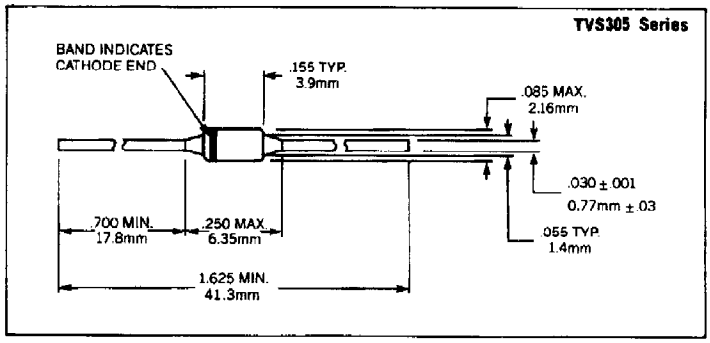
FEATURES
- Up to 500W for 1mS Pulse Power Capability
- Clamping Time in Picoseconds
- Direct Applicability for all popular Microprocessors and IC families
- Metallurgically bonded assembly system to assure long term reliability
- Miniature glass encased hermetically sealed package

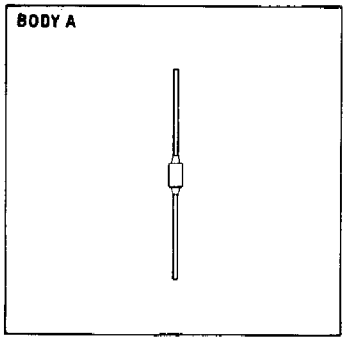
ABSOLUTE MAXIMUM RATINGS @ 25°C

	TVS305-TVS430	TVS505-TVS528
Stand-off Voltage, V_R	5 to 300V	5.0V to 28.0V
Peak Pulse Power (1mS)*	150W	500W
Forward Surge Current (8.3mS half sinewave)	15A	50A
Peak Pulse Current	See Table	See Table
Breakdown Voltage	See Table	See Table
Power, Continuous	3W	5W
Storage and Operating Temperature	−65 to +175°C	−65 to +175°C

*See Figures 3 and 4 for Peak Pulse Power vs Pulse Duration.

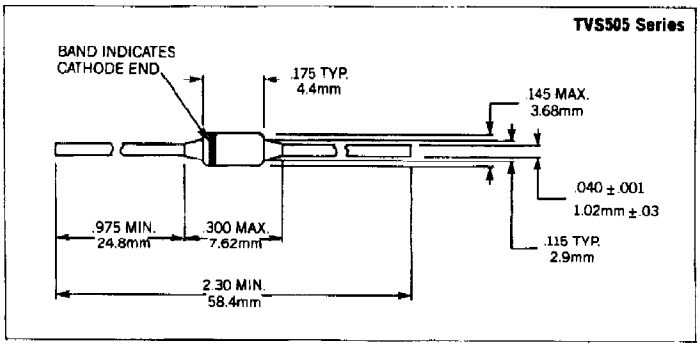
MECHANICAL SPECIFICATIONS

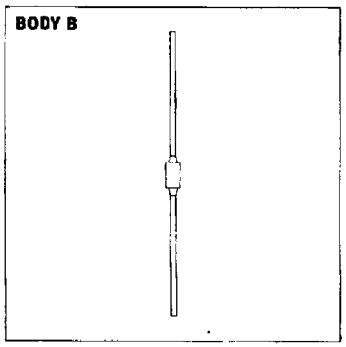




THESE DEVICES ALSO AVAILABLE IN SURFACE MOUNT PACKAGE. SEE SECTION 10

MECHANICAL SPECIFICATIONS





NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

Quality Semi-Conductors

ELECTRICAL SPECIFICATIONS @ 25°C

TVS Part No.	Stand -Off Voltage V_R	Min. Breakdown Voltage $BV_{(min)}$ @ 1mA	Max. Leakage Current I_R @ V_R	Max. Peak Pulse Current* I_{PP}	Max. Clamping Voltage* V_C @ I_{PP}	Max. Clamping Voltage* V_C @ 1A	Max. Clamping Voltage* V_C @ 5A	Max. Clamping Voltage* V_C @ 10A
	V	V	μA	A	V	V	V	
TVS305	5.0	6.0	50	17	8.7	—	—	—
TVS310	10.0	11.1	2	8.9	16.8	—	—	—
TVS312	12	13.8	1	7.1	21.0	—	—	—
TVS315	15	16.7	1	5.9	25	—	—	—
TVS318	18	20.4	1	4.9	31	—	—	—
TVS324	24	28.4	1	3.6	42	—	—	—
TVS328	28	30.7	1	3.2	46	—	—	—
TVS348	48	54	1	1.7	82	—	—	—
TVS360	60	67	1	1.4	105	—	—	—
TVS410	100	111	1	.91	160	—	—	—
TVS420	200	234	1	.42	360	—	—	—
TVS430	300	342	1	.28	520	—	—	—
TVS505	5.0	6.0	300	53.7	9.3	7.4	—	7.9
TVS510	10.0	11.1	5	30.3	16.5	13.2	—	14.4
TVS512	12.0	13.8	5	23.8	21.0	16.5	—	18.5
TVS515	15.0	16.7	5	19.8	25.2	19.7	—	22.2
TVS518	18.0	20.4	5	16.3	30.5	23.8	26.0	—
TVS524	24.0	28.4	5	11.9	42.0	32.4	37.0	—
TVS528	28.0	30.7	5	10.7	46.5	35.9	41.0	—

*For 1mS pulse: see Figure 1.