



Solid State Devices, Inc.

14849 FIRESTONE BLVD.
LA MIRADA, CA 90638-6000
Phone (213) 921-9660 Fax (714) 522-7424

X00061

ST006 thru ST430
and
ST006SM thru ST430SM

TRANSIENT SUPPRESSORS

Glass pasivated diodes in hermetically sealed axial lead or SMD package.

150 WATT TRANSIENT SUPPRESSORS

MAXIMUM RATINGS

Stand-off Voltage, VR.....	6.2 to 430 Volts
Peak Pulse Power (I_{ms}).....	150 Watts
Forward Surge Current (8.3ms).....	15 Amps
Peak Pulse Current.....	See Table
Continuous Power.....	3 Watts
Storage Temperature.....	-65°C to + 175°C
Thermal Resistance, Junction to Lead L=3/8", (ST006 thru ST430).....	60°C/W
Thermal Resistance, Junction to End Cap (ST006SM thru ST430SM).....	30°C/W
Thermal Resistance, Junction to Ambient.....	120°C/W

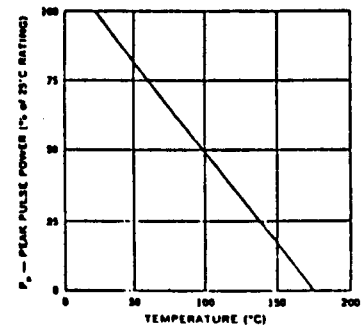
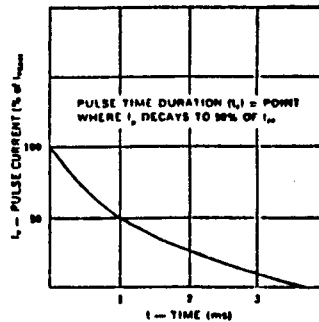
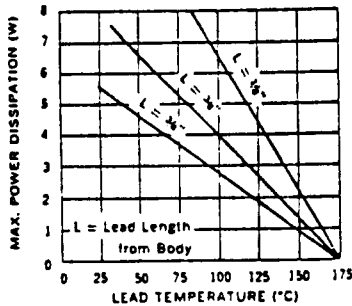
FEATURES

- * Clamping Time in Pico Seconds
- * Small Physical Size
- * Axial or SMD Package

Power Dissipation vs.
Lead Temp Derating Curve

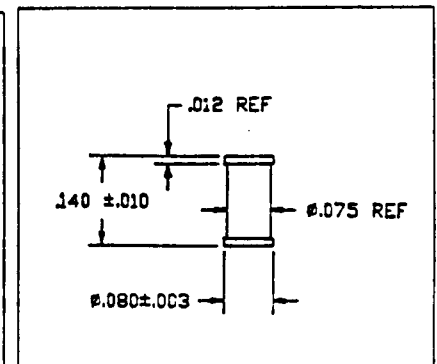
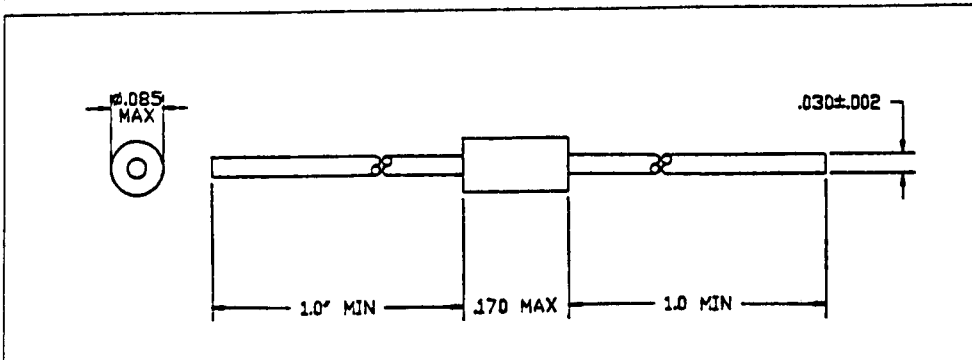
Pulse Waveform

Derating Curve



AXIAL LEAD

SMD



150 WATT TRANSIENT SUPPRESSORS



25°C Electrical Characteristics		Package Style			
AXIAL	SMD	VR Volts	I _R @ V _R uA	Max Clamping Voltage ^a Volts	Max Peak Pulse I _{PP}
ST006	ST006SM	6.2	1500	11.3	13.3
ST0068	ST0068SM	6.8	1200	12.3	12.2
ST007	ST007SM	7.5	100	13.3	11.3
ST008	ST008SM	8.2	20	14.8	10.1
ST009	ST009SM	9.1	5	15.7	9.6
ST010	ST010SM	10	5	17	8.8
ST011	ST011SM	11	5	18.9	7.9
ST012	ST012SM	12	5	20.9	7.2
ST013	ST013SM	13	5	22.9	6.6
ST015	ST015SM	15	5	25.6	5.9
ST016	ST016SM	16	5	28.4	5.3
ST018	ST018SM	18	5	31	4.8
ST020	ST020SM	20	5	33.8	4.4
ST022	ST022SM	22	5	38.1	3.9
ST024	ST024SM	24	5	42.2	3.6
ST027	ST027SM	27	5	46.2	3.2
ST030	ST030SM	30	5	50.1	3.0
ST033	ST033SM	33	5	54.1	2.8
ST036	ST036SM	36	5	60.7	2.5
ST039	ST039SM	39	5	65.5	2.3
ST043	ST043SM	43	5	70.8	2.1
ST047	ST047SM	47	5	78.6	1.9
ST051	ST051SM	51	5	86.5	1.7
ST056	ST056SM	56	5	94.4	1.6
ST062	ST062SM	62	5	103.5	1.5
ST068	ST068SM	68	5	114	1.3
ST075	ST075SM	75	5	126	1.2
ST082	ST082SM	82	5	139	1.1
ST091	ST091SM	91	5	152	1
ST100	ST100SM	100	5	167	.9
ST110	ST110SM	110	5	185	.81
ST120	ST120SM	120	5	204	.73
ST130	ST130SM	130	5	224	.67
ST150	ST150SM	150	5	249	.6
ST160	ST160SM	160	5	276	.54
ST180	ST180SM	180	5	305	.5
ST200	ST200SM	200	5	336	.45
ST220	ST220SM	220	5	380	.4
ST240	ST240SM	240	5	419	.36
ST270	ST270SM	270	5	459	.33
ST300	ST300SM	300	5	498	.3
ST330	ST330SM	330	5	537	.28
ST360	ST360SM ST360SM	360	5	603	.25
ST390	ST390SM	390	5	655	.23
ST430	ST430SM	430	5	707	.21

FOR OPTIONAL HIGH RELIABILITY SCREENING, OR HIGHER NOMINAL ZENER VOLTAGES, CONSULT THE SSDI MARKETING DEPARTMENT.

* For I_{MS} Pulse, see graph of pulse waveform