SOLID STATE DEVICES, INC.
14830 Valley View Blvd * La Mirada, Ca 90638
Phone: (562) 404-4474 * Fax: (562) 404-1773

STA60K7.9P thru STA60K100P

Designer's Data Sheet

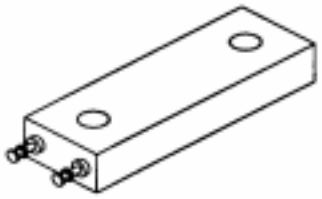
60,000 WATTS PEAK PULSE POWER 7.9 - 100 VOLTS LOW VOLTAGE BIDIRECTIONAL TRANSIENT VOLTAGE SUPPRESSOR

FEATURES:

- 7.90-100 Volt Bidirectional
- Smaller than Microsemi 60KS200C Types
- Hermetically Sealed
- Meets all environmental requirements of MIL-PRF-19500
- Custom configurations available
- TX and TXV Screening Available

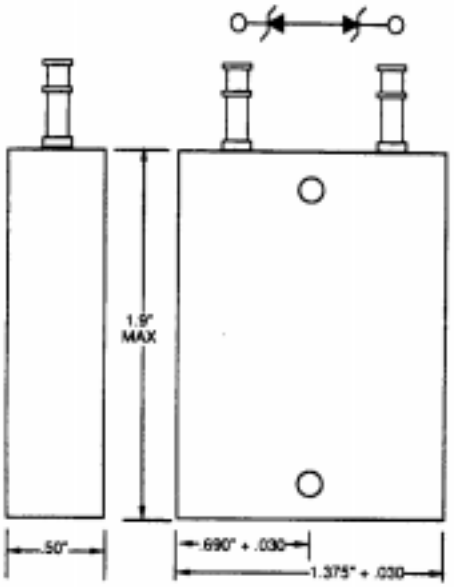
APPLICATIONS:

- Protection of Voltage Sensitive Components
- Protection Against Power Interuption
- Lightning Protection



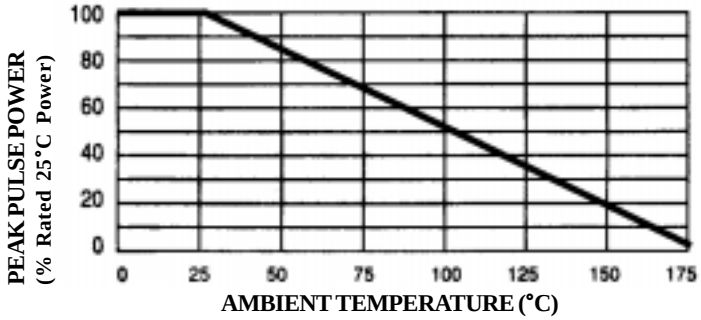
MAXIMUM RATINGS

Stand Off Voltage	V_{RWM}	5.6-75	V
Steady State Power Dissipation	P_D	400	W
Peak Pulse Power @ 1.0 msec	P_{PP}	60,000	W
Peak Pulse Power and Steady State Power Derating	See Graph		
Peak Pulse Power and Pulse Width	See Graph		
Peak Pulse Power and Pulse Width	-65°C to +175°C		



Note:
SSDI Transient Suppressors offer standard Breakdown Voltage Tolerances of ± 10% (A) and ± 5% (B). For other Voltage and Voltage Tolerances, contact SSDI's Marketing Department

PEAK PULSE POWER VS. TEMPERATURE DERATING CURVE



Package shown is standard configuration. SSDI can custom design your module with terminals that meet your unique design criteria. Additionally, SSDI can package these devices with an irregular footprint or offset mounting positions. This data sheet is meant to serve as an example of SSDI's Transient Protection Module Capabilities. For custom configurations, please contact SSDI's Marketing Department.

NOTE: All specifications are subject to change without notification.
SCD's for these devices should be reviewed by SSDI prior to release.

DATA SHEET #: T00008C

RMD

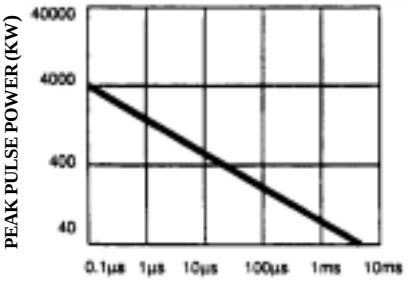
STA60K7.9P thru STA60K100P

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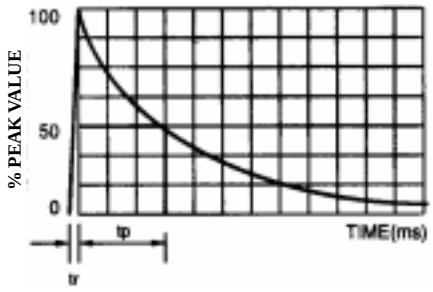
Electrical Characteristics

Part Number	Break Down (note 1)		Max Reverse Stand Off		Peak Pulse Clamping		Maximum Continuous Current (note 3)	Dynamic Impedance (note 2)	Maximum Termperature Coefficient
	Nominal Voltage	Test Current	Voltage	Reverse Leakage Current	Voltage (max)	@ Current tp=1ms (note 4)			
For 5% Voltage Tolerance specify "B" in place of A	V_{BR}	$@I_{BRT}$	V_{RWM}	I_R @ V_{RWM}	V_C	I_{PP}	I_{RM}	Z_{BR} @ I_{BRT}	TC
	Volts	A	Volts	mA	Volts	A	A	Ohms	% / °C
STA60K7.9P	7.9	7.0	5.6	60	14.5	5120	28	0.07	.03
STA60K8.9P	8.9	6.0	6.2	48	15.0	4800	30	0.08	.03
STA60K9.8P	9.8	6.0	6.8	1.6	16.0	4360	33	0.09	.03
STA60K10.7P	10.7	5.0	7.5	0.8	17.5	4000	38	0.10	.05
STA60K11P	11.0	5.0	8.2	0.8	18.5	3720	43	0.11	.05
STA60K12.7P	12.7	4.0	9.1	0.8	19.5	3480	45	0.11	.05
STA60K13.5P	13.5	4.0	10	0.8	21.0	3160	48	0.12	.05
STA60K15P	15.0	3.0	11	0.8	23.0	2720	48	0.12	.05
STA60K16.7P	16.7	3.0	12	0.8	25.0	2560	48	0.13	.06
STA60K18P	18.0	2.6	13	0.8	27.0	2280	50	0.13	.06
STA60K20.2P	20.2	2.6	15	0.8	30.0	2080	63	0.15	.06
STA60K22.6P	22.6	2.0	16	0.8	33.5	1880	70	0.16	.06
STA60K24.5P	24.5	2.0	18	0.8	36.0	1720	75	0.18	.06
STA60K27.9P	27.9	2.0	20	0.8	40.0	1560	95	0.25	.06
STA60K30.5P	30.5	1.6	22	0.8	43.5	1400	125	0.40	.06
STA60K34P	34.0	1.6	24	0.8	47.0	1280	175	0.50	.06
STA60K36P	36.0	1.2	27	0.8	52.0	1200	200	0.60	.06
STA60K39P	39.0	1.2	30	0.8	55.0	1080	175	0.70	.06
STA60K45P	45.0	1.2	33	0.8	60.0	1000	250	1.0	.06
STA60K49P	49.0	1.0	36	0.8	65.0	920	300	1.2	.07
STA60K51P	51.0	1.0	39	0.8	70.0	840	350	1.4	.07
STA60K57P	57.0	0.8	43	0.8	78.0	760	450	1.8	.07
STA60K62P	62.0	0.8	47	0.8	87.0	680	500	2.0	.07
STA60K68P	68.0	0.8	51	0.8	93.0	640	550	2.2	.08
STA60K75P	75.0	0.8	56	0.8	103.3	560	625	2.5	.08
STA60K82P	82.0	0.6	62	0.8	113.5	520	750	3.0	.08
STA60K91P	91.0	0.6	68	0.8	126.5	480	1000	4.0	.08
STA60K100P	100.0	0.6	75	0.8	138.5	440	1125	4.5	.09

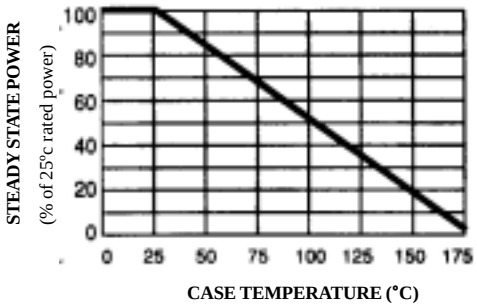
PEAK PULSE POWER VS. PULSE WIDTH



CURRENT PULSE WAVEFORM



STEADY STATE POWER DERATING



For optional high reliability screening or higher zener voltages, consult SSDI MARKETING Department.

Notes:

1. All voltages are measured with automated test set using 35 msec test time. Longer or shorter test times will have a corresponding effect on the measured value due to heating effects.
2. Dynamic impedance is derived from the AC voltage divided by the AC current with RMS value of 10% of DC test current superimposed on the test current.
3. Ratings based on 25° C case temperature.
4. Pulse width (tp) is delined as the time from rated peak pulse current IPP to the point where peak pulse current decayed to 50% of rated IPP.