

POWER BUS VOLTAGE SUPPRESSOR

APPLICATIONS

- Power Protection

FEATURES

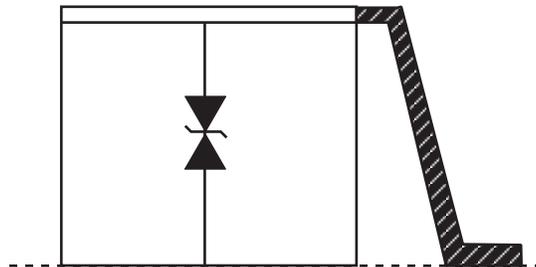
- 2250 kilowatts Peak Pulse Power per Line ($t_p = 8/20\mu s$)
- 78 Volts Bidirectional
- 15kA (8/20 μs)
- RoHS Compliant (Exemption 7A - High Power Device)

MECHANICAL CHARACTERISTICS

- Black Molded Shell
- Lead-Free Silver Plating
- Approximate Weight: 11 grams
- Flammability Rating UL 94V-0

PRELIMINARY

CIRCUIT DIAGRAM



TYPICAL DEVICE CHARACTERISTICS
MAXIMUM RATINGS @ 25°C Unless Otherwise Specified

PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp=8/20μs)	P_{PP}	2250	kilowatts
Operating Temperature	T_L	TBD	°C
Storage Temperature	T_{STG}	TBD	°C
Peak Pulse Current (tp=8/20μs)	$I_{PP\ MAX}$	15	kA

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

PART NUMBER	RATED STAND-OFF VOLTAGE V_{WM} VOLTS	MINIMUM BREAKDOWN VOLTAGE @5mA $V_{(BR)}$ VOLTS	MAXIMUM CLAMPING VOLTAGE (Fig. 2) @ I_{PP} V_C VOLTS	MAXIMUM LEAKAGE CURRENT @ V_{WM} I_D μA	PEAK PULSE CURRENT (FIG. 2) I_{PPM} kAMPS
2700SM78CA	78	86	150	10	15

PRELIMINARY

TYPICAL DEVICE CHARACTERISTICS

FIGURE 1
PEAK PULSE POWER VS PULSE TIME

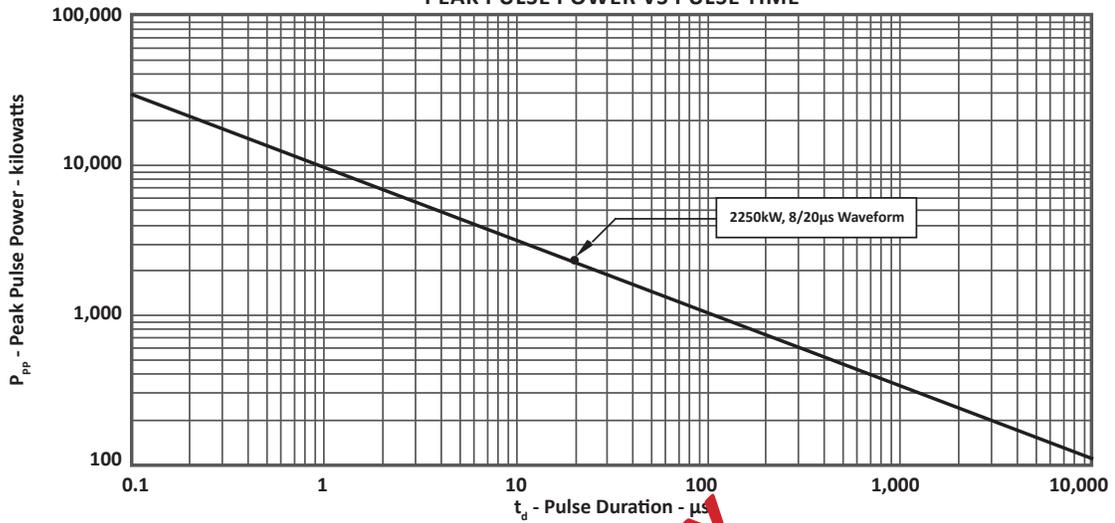


FIGURE 2
PULSE WAVE FORM

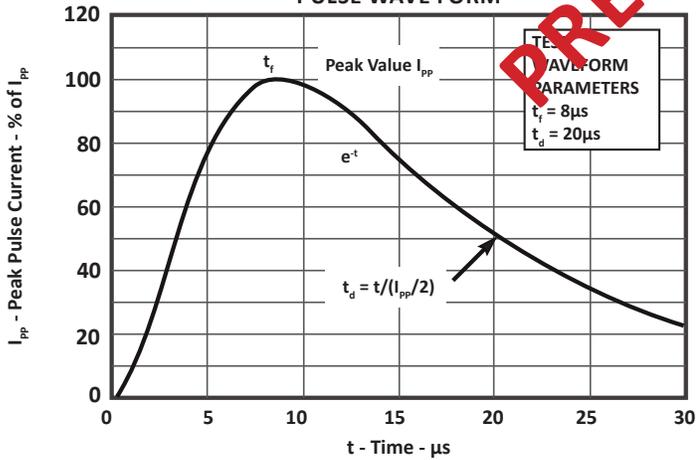
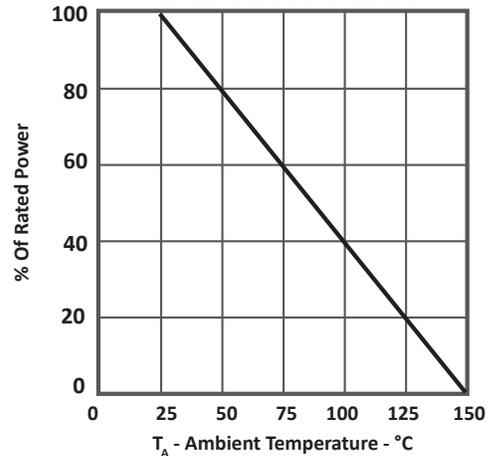


FIGURE 3
POWER DERATING CURVE



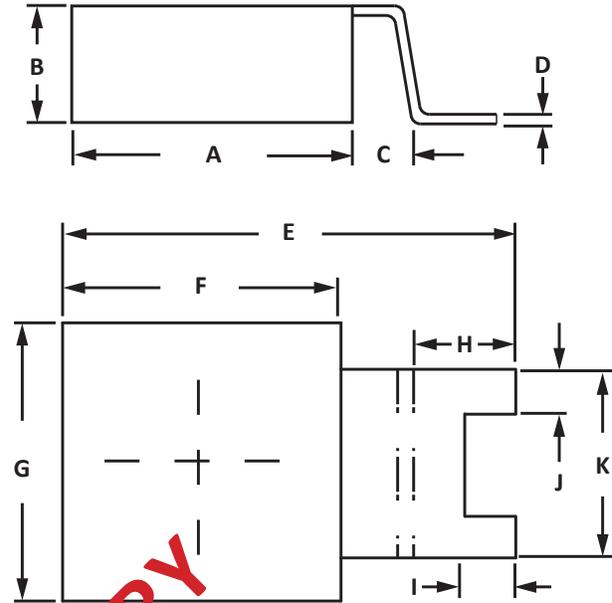
PRELIMINARY

PACKAGE INFORMATION

OUTLINE DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	14.4	15.6	0.567	0.614
B	6.9	8.1	0.212	0.319
C	1.8	2.4	0.071	0.094
D	0.48	0.54	0.019	0.021
E	19.3	20.4	0.76	0.803
F	14.4	15.6	0.567	0.614
G	14.4	15.6	0.567	0.614
H	1.9	2.5	0.075	0.098
I	0.9	1.5	0.040	0.059
J	3.65	4.25	0.144	0.167
K	10.4	11.0	0.409	0.433

NOTES

1. Controlling dimensions in millimeters.
2. Recommended that customer applies maximum 80% coverage of solder between disc and the solder pad.
3. Dimension "C" is reference.



PRELIMINARY

ORDERING INFORMATION

PART NUMBER	MARKING
2700SM78CA	Logo, Date Code and Part Number

COMPANY INFORMATION

COMPANY PROFILE

ProTek Devices, based in Tempe, Arizona USA, is a manufacturer of Transient Voltage Suppression (TVS) products designed specifically for the protection of electronic systems from the effects of lightning, Electrostatic Discharge (ESD), Nuclear Electromagnetic Pulse (NEMP), inductive switching and EMI/RFI. With over 25 years of engineering and manufacturing experience, ProTek designs TVS devices that provide application specific protection solutions for all electronic equipment/systems.

ProTek Devices Analog Products Division, also manufactures analog interface, control, RF and power management products.

CONTACT US

Corporate Headquarters

2929 South Fair Lane
Tempe, Arizona 85282
USA

By Telephone

General: 602-431-8101
Sales: 602-414-5109
Customer Service: 602-414-5114

By Fax

General: 602-431-2288

By E-mail:

Sales: sales@protekdevices.com
Customer Service: service@protekdevices.com
Technical Support: support@protekdevices.com

Web

www.protekdevices.com
www.protekanalog.com

PRELIMINARY

COPYRIGHT © ProTek Devices 2009 - This literature is subject to all applicable copyright laws and is not for resale in any manner.

SPECIFICATIONS: ProTek reserves the right to change the electrical and or mechanical characteristics described herein without notice.

DESIGN CHANGES: ProTek reserves the right to discontinue product lines without notice and that the final judgement concerning selection and specifications is the buyer's and that in furnishing engineering and technical assistance. ProTek assumes no responsibility with respect to the selection or specifications of such products. ProTek makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does ProTek assume any liability arising out of the application or use of any product or circuit and specifically disclaims any and all liability without limitation special, consequential or incidental damages.

LIFE SUPPORT POLICY: ProTek Devices products are not authorized for use in life support systems without written consent from the factory.