

HIGH POWER AIRCRAFT/ VEHICLE DC BUS VOLTAGE SUPPRESSOR
APPLICATIONS

- ✓ DC Power Supply Protection
- ✓ MIL-STD-704 Power Bus Protection

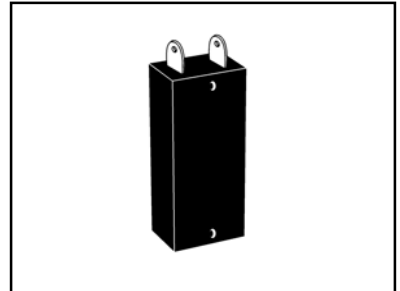
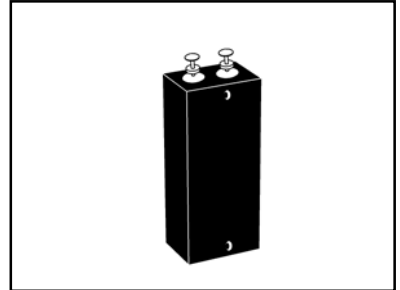
IEC COMPATIBILITY (EN61000-4)

- ✓ *Meets the Following Military Specifications:*
 - MIL-STD-704
 - MIL-PRF-19500
- ✓ 15 kilowatts Peak Pulse Power per Line (tp=10/1000µs)
- ✓ Each Device 100% Tested
- ✓ 28 Volt Power Supply Protection

MECHANICAL CHARACTERISTICS

- ✓ Molded Plastic Case
- ✓ Weight 38 grams: 704-15K36 & 65 grams: 704-15K36T (Approximate)
- ✓ Flammability Rating UL 94V-0
- ✓ Device Marking: Logo, Date Code & Part Number
- ✓ Positive Terminal Indicated By Polarity Dot
- ✓ Screening for Military Requirements IAW MIL-PRF-19500 is Available
- ✓ Screening Available Upon Request - The 704 series can be screened upon request for military requirements in accordance with MIL-PRF-19500 (applicable test). Standard screening is available based on the following options:
 - H1 - Submodule Screening per test plans 05231 & 05232
 - H2 - Submodule & Module Screening per test plan 05233
 - H3 - Submodule & Module Screening, Module Group B & C Lot Testing per test plans 05234 & 05235

Warranty Disclaimer is required for purchase of this part. Please see warranty disclaimer form for more information.


704-15K36

704-15K36T
MAXIMUM RATINGS @ 25°C Unless Otherwise Specified

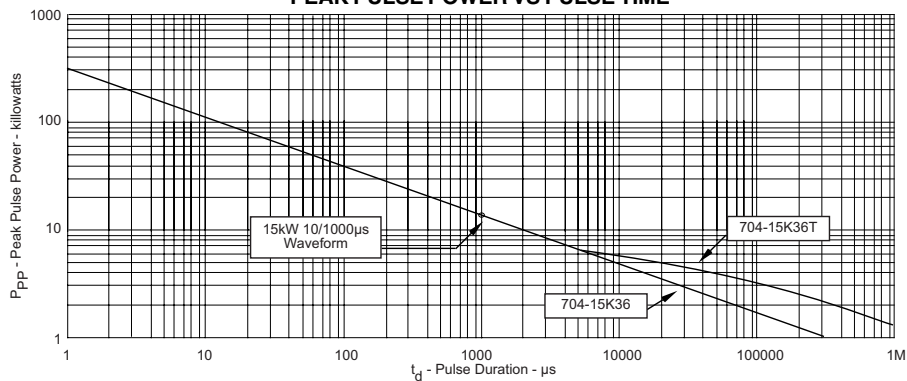
PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp = 10/1000µs) - See Fig. 1	P_{PP}	15	kilowatts
Operating Temperature	T_L	-55 to 150	°C
Storage Temperature	T_{STG}	-55 to 150	°C
Steady State Power Dissipation @ 50°C	T_A	10.0	Watts
Forward Surge Rating @ 25°C 1/120 seconds	F_I	300	Amps

704-15K36 thru 704-15K36T

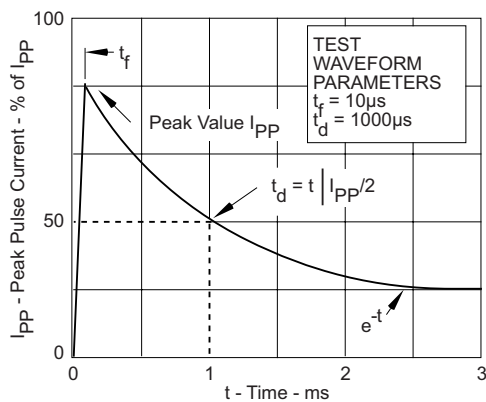
DEVICE CHARACTERISTICS

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified						
PART NUMBER	RATED STAND-OFF VOLTAGE	MINIMUM BREAKDOWN VOLTAGE	MAXIMUM CLAMPING VOLTAGE (See Fig. 2)	MAXIMUM LEAKAGE CURRENT	MAXIMUM PEAK PULSE CURRENT (See Fig. 2)	MAXIMUM FORWARD VOLTAGE
	V_{WM} VOLTS	@10mA $V_{(BR)}$ VOLTS	@ I_{PPM} V_C VOLTS	@ V_{WM} I_b μA	I_{PPM} AMPS	@100A, 8.3ms V_F VOLTS DC
704-15K36	31.5	36	53	100	300	3.0
704-15K36T	31.5	36	53	500	300	15.0

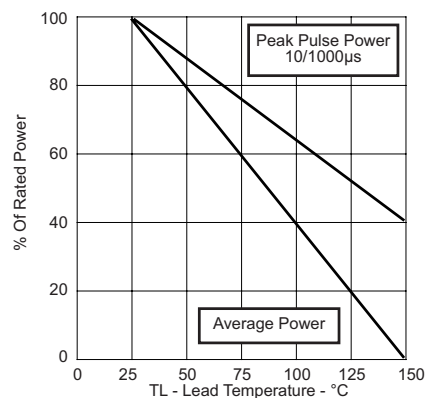
**FIGURE 1
PEAK PULSE POWER VS PULSE TIME**



**FIGURE 2
PULSE WAVE FORM**



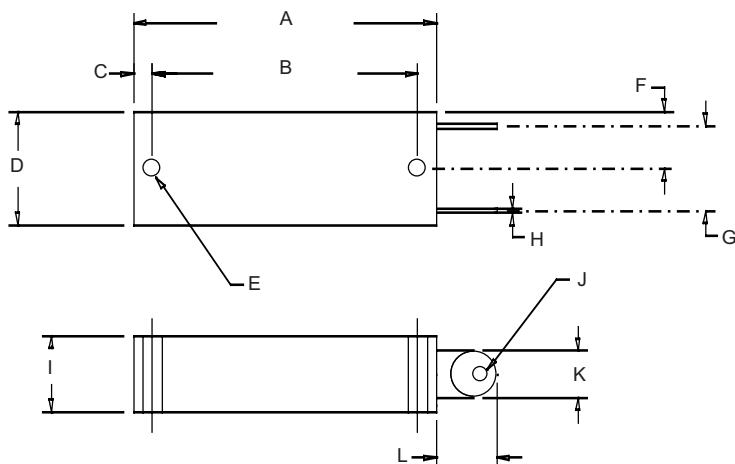
**FIGURE 3
POWER DERATING CURVE**



704-15K36 thru 704-15K36T

PACKAGE OUTLINE & DIMENSIONS

704-15K36 PACKAGE OUTLINE



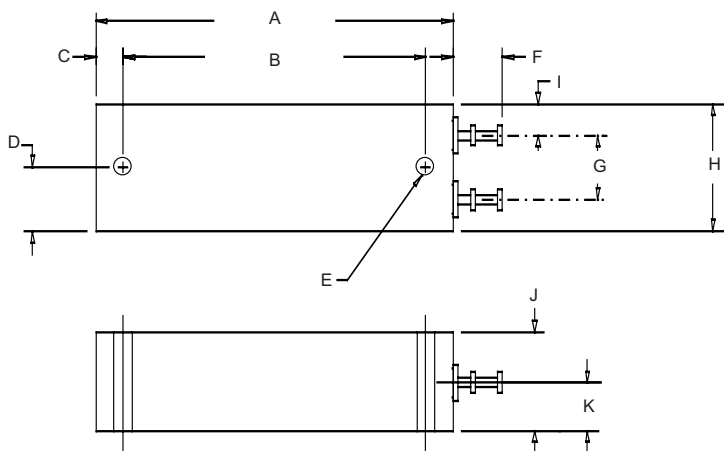
704-15K36



DIMENSIONS

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	49.28	51.56	1.97	2.03
B	43.92	44.96	1.73	1.77
C	2.79	3.56	0.110	0.140
D	18.29	19.81	0.72	0.78
E*	3.18 DIA	3.18 DIA	0.125 DIA	0.125 DIA
F	8.76	10.29	0.345	0.405
G	13.51	15.04	0.532	0.592
H*	0.66	0.71	0.026	0.028
I	11.94	13.46	0.47	0.53
J	2.41	2.92	0.095	0.115
K	7.70	8.20	0.303	0.323
L	9.40	10.92	0.37	0.43

704-15K36T PACKAGE OUTLINE



704-15K36T



DIMENSIONS

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	62.74	64.26	2.47	2.53
B	53.34	54.48	2.10	2.145
C	4.32	5.33	0.17	0.21
D	10.54	12.07	0.415	0.475
E*	3.18 DIA	3.18 DIA	0.125 DIA	0.125 DIA
F	8.26	9.27	0.325	0.365
G*	11.43	11.43	0.450	0.450
H	21.84	23.37	0.86	0.92
I*	5.59	5.59	0.220	0.220
J	16.51	17.53	0.65	0.69
K*	8.51	8.51	0.335	0.335

Outline & Dimensions: Rev 1 - 4/04, 06035

Note*: Dimensions are nominal

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

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.

SAFETY: In case where extremely high reliability is required, safety should be ensured by using semiconductor devices that feature assured safety or by means of users fail-safe precautions or other arrangement

LIABILITY: In no event will ProTek be liable for any damages that may result from an accident or any other cause during operation of the users units according to the datasheet(s) specifications.

In no event will ProTek be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the maximum rating.

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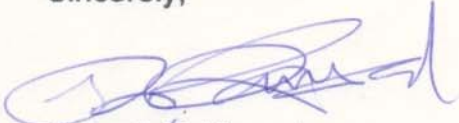
TO WHOM IT MAY CONCERN

SUBJECT: Protek Devices part number 704-15K36 Warranty Disclaimer

WARRANTY DISCLAIMER

Protek warrants only that the 704-15K36 product (the "Device") has been manufactured to meet the electrical specifications set forth on the electrical specification data sheet posted on Protek's website. Protek disclaims all other warranties. If the Device is applied or used in circumstances in which the electrical characteristics specified for the Device are exceeded, the Device may fail. Protek is not liable for any failures of the Device if the Device is used in circumstances that exceed the electrical specifications for the Device posted on Protek's website. If for any reason the Device fails, customer's sole and exclusive remedy shall be replacement of the failed Device. Customer assumes all risks arising from incorporation of the Device into any other product. Customer acknowledges that Protek Devices has made the Device available to Customer for inspection, and Customer has had an opportunity to inspect and test the Device.

Sincerely,



Rakesh K. Kansal
President
ProTek Devices

Acknowledgement: Signed on August 22, 2007 for and on behalf of

(Signature of Authorized Company Representative)

Name & Title: _____

Address : _____

Telephone : _____