

**HIGH POWER AIRCRAFT/VEHICLE DC BUS VOLTAGE SUPPRESSOR**
**APPLICATIONS**

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

**IEC COMPATIBILITY (EN61000-4)**

- ✓ 61000-4-5 (Surge): 95A, 8/20 $\mu$ s - Level 4 (Line-Gnd) & 48A, Level 4 (Line-Line)

**FEATURES**

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

**MECHANICAL CHARACTERISTICS**

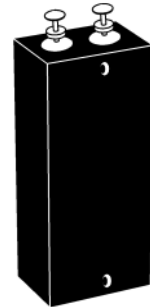
- ✓ Molded Plastic Case
- ✓ Weight 38 grams: 704-15K36 & 65 grams: 704-15K36T (Approximate)
- ✓ Flammability Rating UL 94V-0
- ✓ Device Marking: Logo, Date Code & Part Number
- ✓ Positive Terminal Indicated By Polarity Dot
- ✓ Screening for Military Requirements IAW MIL-PRF-19500 is Available
- ✓ Screening 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

15,000 WATTS



704-15K36

15,000 WATTS



704-15K36T

**MAXIMUM RATINGS @ 25°C Unless Otherwise Specified**

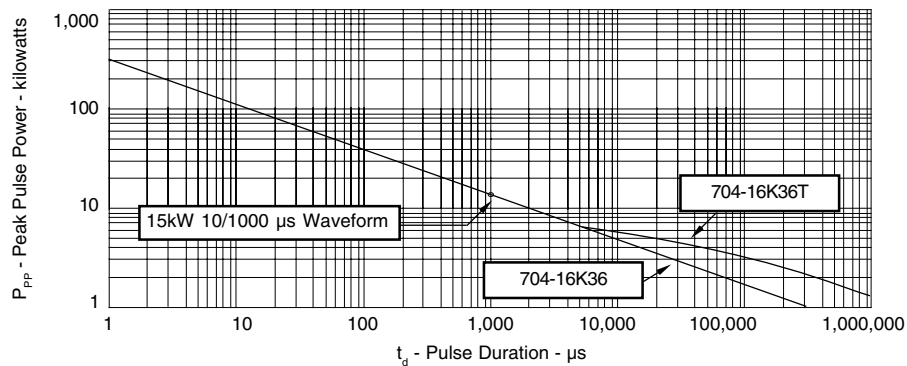
PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp = 10/1000 $\mu$ s) - See Figure 1	$P_{PP}$	15	kilowatts
Operating Temperature	$T_J$	-55°C to 150°C	°C
Storage Temperature	$T_{STG}$	-55°C to 150°C	°C
Forward Surge Rating @ 25°C 1/120 seconds	$F_I$	300	Amps
Steady State Power Dissipation @ 25°C	$T_A$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

## DEVICE CHARACTERISTICS

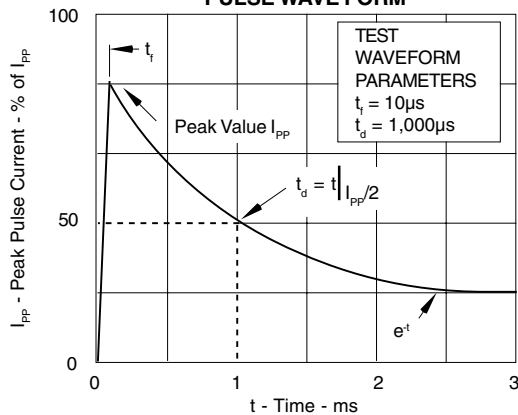
### ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

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	@ $V_{WM}$ $I_D$ $\mu A$	$I_{PPM}$ AMPS	@ 100A, 8.3ms $I_F$ VOLTS DC
704-15K36	31.5	36	53	100	300	3.0
704-15K36T	31.5	36	53	500	300	15.0

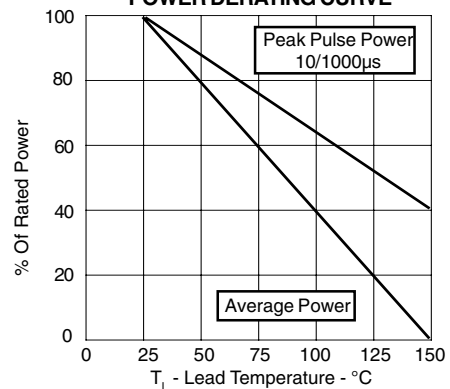
**FIGURE 1  
PEAK PULSE POWER VS PULSE TIME**



**FIGURE 2  
PULSE WAVE FORM**



**FIGURE 3  
POWER DERATING CURVE**



# 704-15K36 & 704-15k36T

## PACKAGE OUTLINE & DIMENSIONS

704-15K36 PACKAGE OUTLINE				
<b>704-15K36</b>				
<b>DIMENSIONS</b>				
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				
<b>704-15K36T</b>				
<b>DIMENSIONS</b>				
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
<b>Note*:</b> Dimensions are nominal				
<b>Outline &amp; Dimensions: Rev 1 - 4/04, 06035</b>				

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