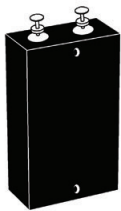
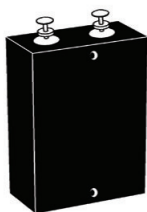


## SHIPBOARD/AC POWER BUS VOLTAGE SUPPRESSOR



**60KS PACKAGE**



**90KS PACKAGE**

### DESCRIPTION

The 60 & 90KS Series of devices are designed in accordance with DOD-STD-1399, section 300 interface standard and MIL-STD704A for shipboard systems, electrical power and alternating current. When large voltage transients endanger voltage sensitive components, this series provides reliable protection against power interruptions and shore power switch-over.

This series can be screened upon request for military requirements in accordance with MIL-PRF-19500 (applicable tests).

### FEATURES

- DOD-STD-1399 & MIL-STD-704A Compliant
- 60 & 90 kilowatts Peak Pulse Power per Line (tp = 1.2/50μs)
- Each Device 100% Tested
- 200 Volts Bidirectional

### MECHANICAL CHARACTERISTICS

- Hermetically Sealed Glass to Metal Sub-Assemblies
- Approximate Weight: 50 grams
- Flammability Rating UL 94V-0
- Screening Available Upon Request:
  - H1 - Submodule Screening (Test Plans 05231 & 05232)
  - H2 - Submodule & Module Screening (Test Plan 05233)
  - H3 - Submodule & Module Screening with Group B & C Lot Testing (Test Plans 05234 & 05235)

### APPLICATIONS

- AC Power Protection
- Shipboard (Line-Line) Protection
- Differential AC Power Bus
- Aircraft AC Power Bus

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

PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp = 1.2/50μs) - See Figure 1	$P_{PP}$	60 & 90	kilowatts
Operating Temperature	$T_L$	-55 to 150	°C
Storage Temperature	$T_{STG}$	-55 to 150	°C
Steady State Power Dissipation	-	10.0	Watts

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

PART NUMBER	RATED STAND-OFF VOLTAGE  $V_{WM}$ VOLTS	MINIMUM BREAKDOWN VOLTAGE  @1mA $V_{(BR)}$ VOLTS	MAXIMUM CLAMPING VOLTAGE (Fig. 2)  @ $I_{PP}$ $V_C$ VOLTS	MAXIMUM LEAKAGE CURRENT  @ $V_{WM}$ $I_D$ μA	MAXIMUM PEAK PULSE CURRENT  $I_{PPM}$ AMPS
60KS200C	180	200	335	10	180
90KS200C	180	200	280	0.5	180

TYPICAL DEVICE CHARACTERISTICS

FIGURE 1  
PEAK PULSE POWER VS PULSE TIME

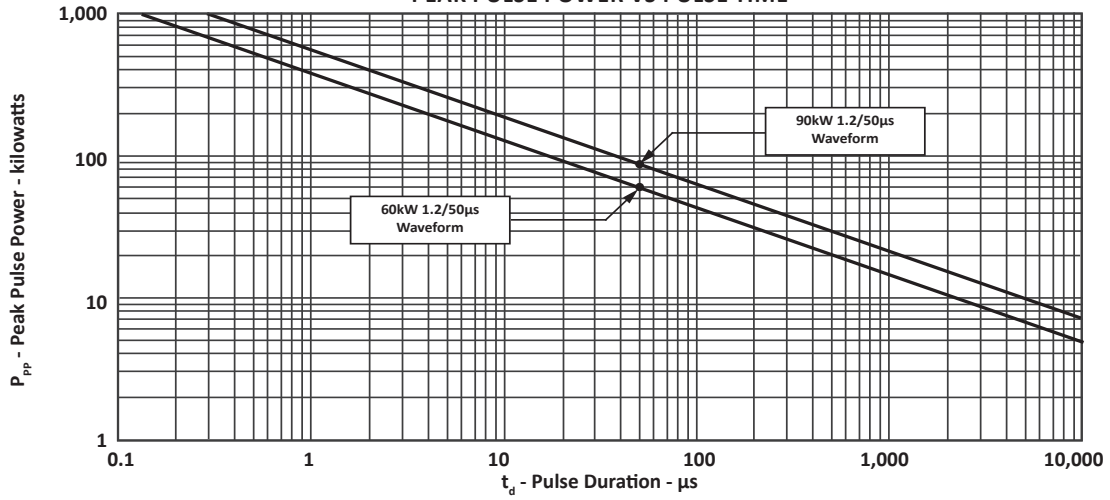


FIGURE 2  
PULSE WAVEFORM

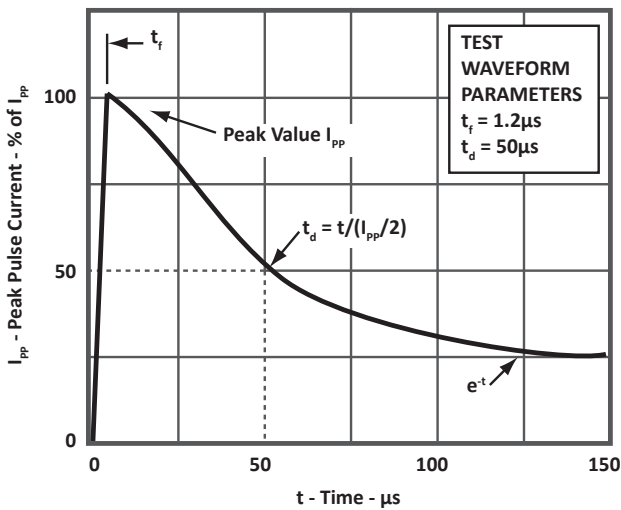
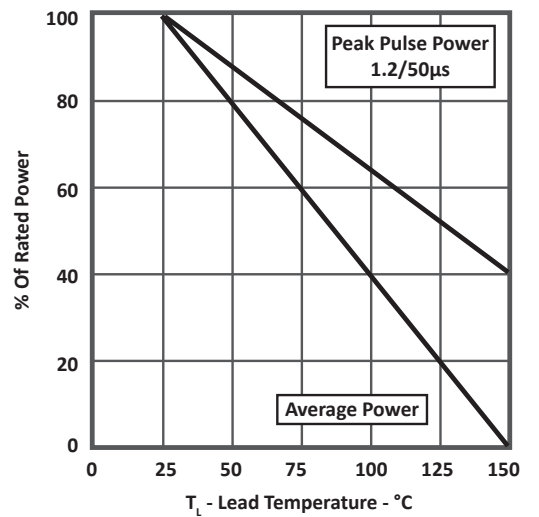
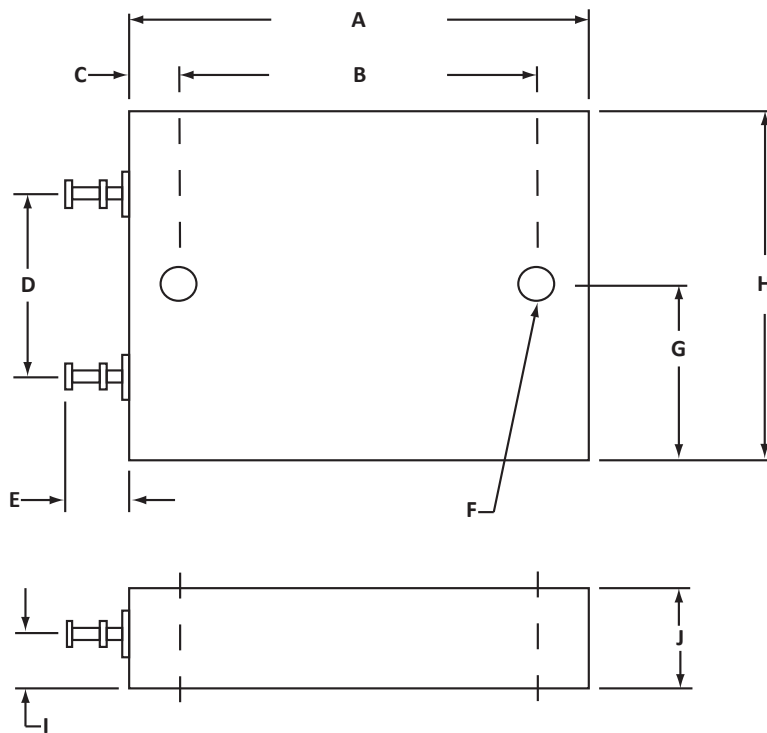


FIGURE 3  
POWER DERATING CURVE



**PACKAGE INFORMATION**
**90KS OUTLINE DIMENSIONS**

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	-	63.50	-	2.50
B	47.75	48.77	1.88	1.92
C	6.10	6.60	0.24	0.26
D	24.89	25.91	0.98	1.02
E	-	10.16	-	0.40
F	4.90 DIA.	5.21 DIA.	0.193 DIA.	0.205 DIA.
G	22.66	23.06	0.892	0.908
H	45.34	46.10	1.785	1.815
I	6.48	7.49	0.255	0.295
J	-	13.97	-	0.55

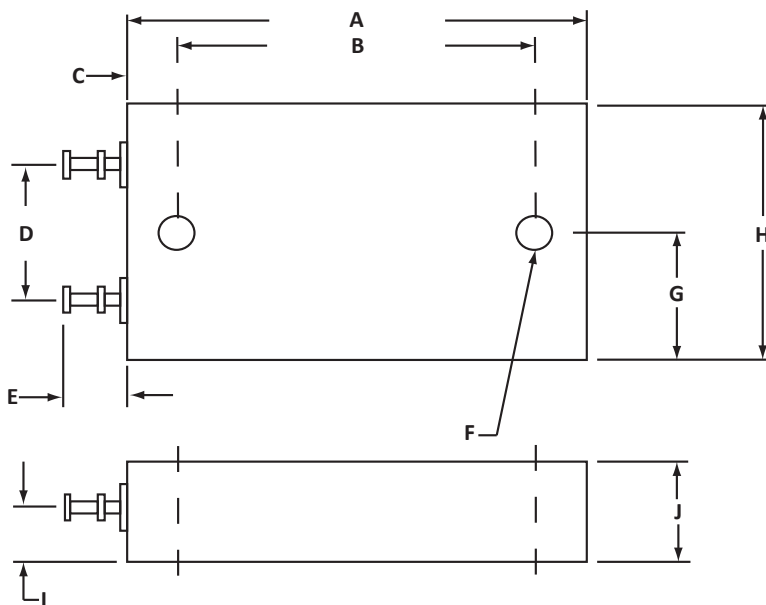


**PACKAGE INFORMATION**
**60KS OUTLINE DIMENSIONS**

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	56.38	57.91	2.22	2.28
B	49.02	50.03	1.93	1.97
C	3.43	4.17	0.135	0.165
D	20.32		0.800	
E	8.26	9.27	0.325	0.365
F	3.18 DIA.		0.125 DIA.	
G	16.76	18.29	0.660	0.720
H	34.16	35.69	1.345	1.405
I	6.35		0.250	
J	11.94	13.46	0.47	0.53

**NOTES**

1. Dimensions "D", "F" and "I" are nominal.


**ORDERING INFORMATION**

BASE PART NUMBER	SUBMODULE SCREENING	SUBMODULE & MODULE SCREENING	SUBMODULE & MODULE SCREENING, GROUP B & C LOT TESTING
60KS200C	H1	H2	H3
90KS200C	H1	H2	H2

**NOTES**

1. Marking on Part - logo, date code and part number.

Package outline per document number 06033.R1 9/09

## COMPANY INFORMATION

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### COMPANY PROFILE

In business more than 20 years, ProTek Devices™ is a privately-held company located in Tempe, Arizona, that offers a product line of transient voltage suppressors (TVS); avalanche breakdown diodes; steering diode TVS arrays and other surge suppressor component products. These TVS devices protect electronic systems from the effects of lightning, electrostatic discharge (ESD), nuclear electromagnetic pulses (NEMP), inductive switching and EMI / RFI. ProTek Devices also offers high performance interface and linear products that include analog switches; multiplexers; LED drivers; audio control ICs; RF and related high frequency products. The analog devices work in a host of consumer; industrial; automotive and other applications.

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