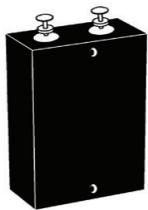


**60KS PACKAGE****90KS PACKAGE****DESCRIPTION**

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

- **RTCA DO-160G COMPLIANT PRODUCT**
- DOD-STD-1399 & MIL-STD-704A Compliant
- 60 & 90 kilowatts Peak Pulse Power per Line ($t_p = 1.2/50\mu s$)
- Each Device 100% Tested
- 200 Volts Bidirectional
- 60KS200C Meets CE Low Voltage Directive

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

- Aircraft & Shipboard AC Power Protection (Line-Ground)

TYPICAL DEVICE CHARACTERISTICS

RTCA DO-160G COMPLIANT PRODUCT

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	MINIMUM BREAKDOWN VOLTAGE	MAXIMUM CLAMPING VOLTAGE (Fig. 2)	MAXIMUM LEAKAGE CURRENT	MAXIMUM PEAK PULSE CURRENT
	V_{WM} VOLTS	@1mA $V_{(BR)}$ VOLTS	@ I_{PP} V_C VOLTS	@ V_{WM} I_D μA	I_{PPM} AMPS
60KS200C	180	200	335	10	180
90KS200C	180 180	200 200	280 335	0.5 0.5	180 270

FIGURE 1
PEAK PULSE POWER VS PULSE TIME

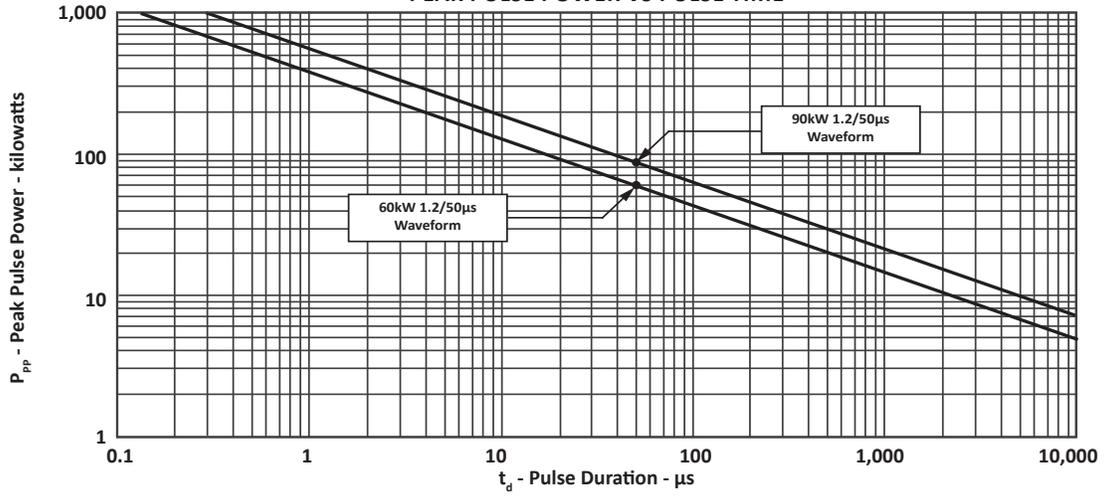


FIGURE 2
PULSE WAVEFORM

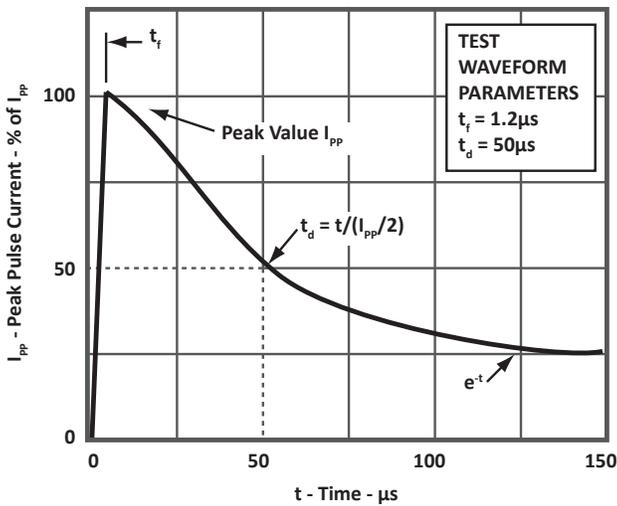
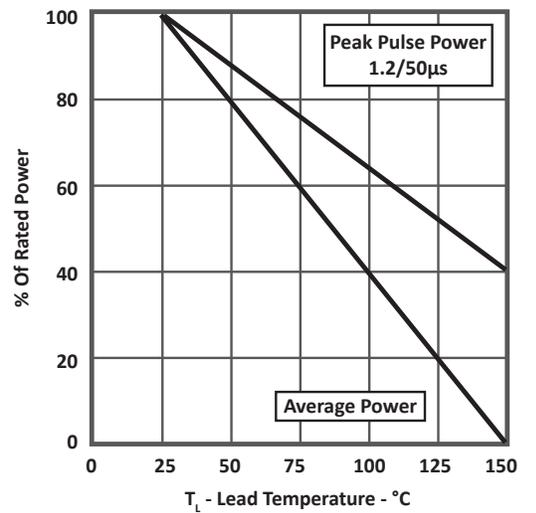


FIGURE 3
POWER DERATING CURVE

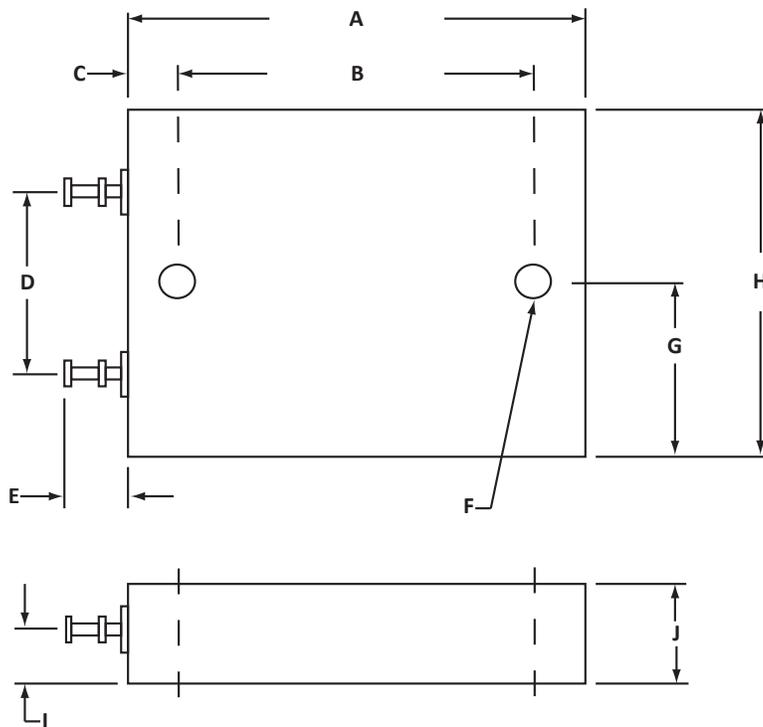


PACKAGE INFORMATION

RTCA DO-160G COMPLIANT PRODUCT

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



Note: Recommended torque value for mounting: less than 10 inch pounds

PACKAGE INFORMATION

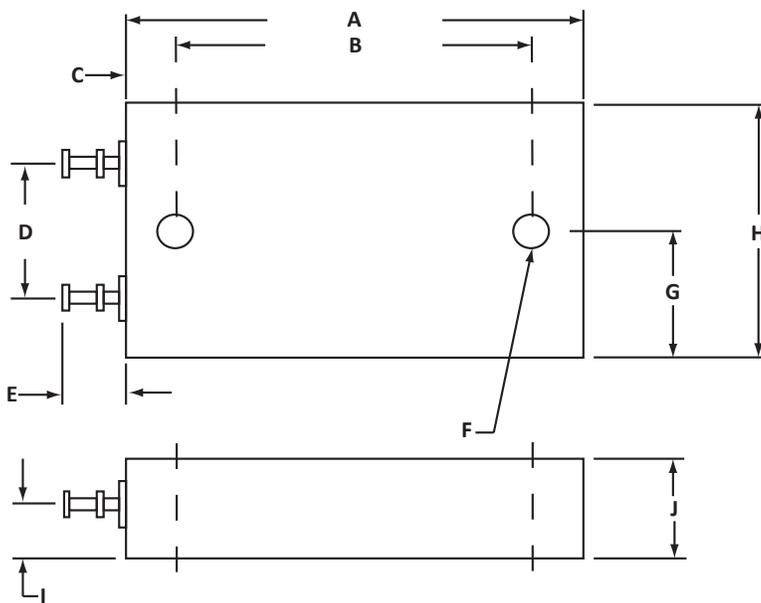
RTCA DO-160G COMPLIANT PRODUCT

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.



Note: Recommended torque value for mounting: less than 10 inch pounds

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.

COMPANY INFORMATION**RTCA DO-160G COMPLIANT PRODUCT****COMPANY PROFILE**

In business more than 30 years, ProTek Devices™ is a privately held semiconductor company. The company offers a product line of overvoltage protection that include Transient Voltage Suppressor (TVS) Arrays, Steering Diode Array Hybrids, High-power Components and Modules, as well as Steering Diodes, EMI Filter/TVS Arrays and Thyristor Surge Suppressors. These components deliver circuit protection in electronic systems from numerous overvoltage events. They include lightning; electrostatic discharge (ESD); nuclear electromagnetic pulses (NEMP); inductive switching; and electromagnetic interference (EMI) / radio frequency interference (RFI). ProTek Devices is an ISO 9001 certified company.

CONTACT US**Corporate Headquarters**

2929 South Fair Lane
Tempe, Arizona 85282
USA

By Telephone

General: 602-431-8101
Sales: & Marketing: 602-414-5109
Customer Service: 602-414-5114
Product Technical Support: 602-414-5107

By Fax

General: 602-431-2288

By E-mail:

Asia Sales: asiasales@protekdevices.com
Europe Sales: europesales@protekdevices.com
U.S. Sales: ussales@protekdevices.com
Distributor Sales: distysales@protekdevices.com
Customer Service: service@protekdevices.com
Technical Support: support@protekdevices.com

Web

www.protekdevices.com

COPYRIGHT © ProTek Devices 1998 - 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.