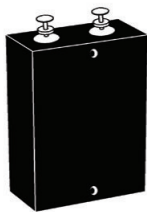
**60KS PACKAGE****90KS PACKAGE****DESCRIPTION**

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

**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

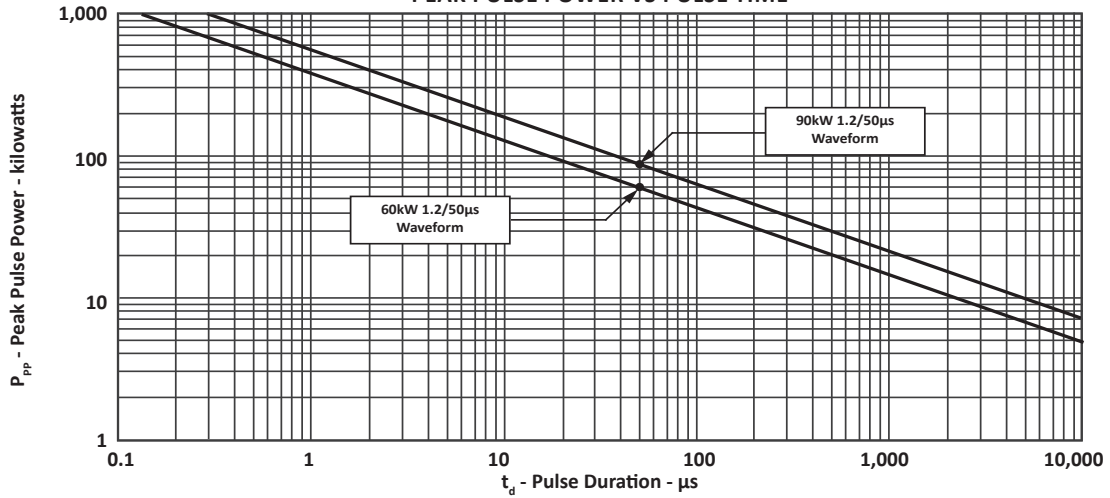
## MAXIMUM RATINGS @ 25°C Unless Otherwise Specified

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

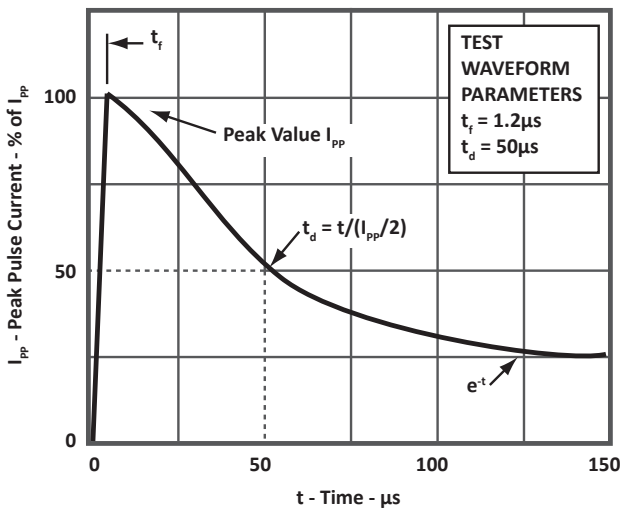
## ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

PART NUMBER	RATED STAND-OFF VOLTAGE  $V_{WM}$ 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	180 180	200 200	280 335	0.5 0.5	180 270

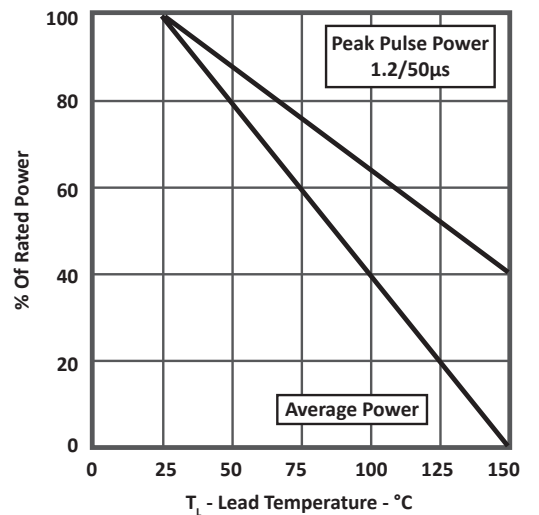
**FIGURE 1**  
PEAK PULSE POWER VS PULSE TIME



**FIGURE 2**  
PULSE WAVEFORM



**FIGURE 3**  
POWER DERATING CURVE

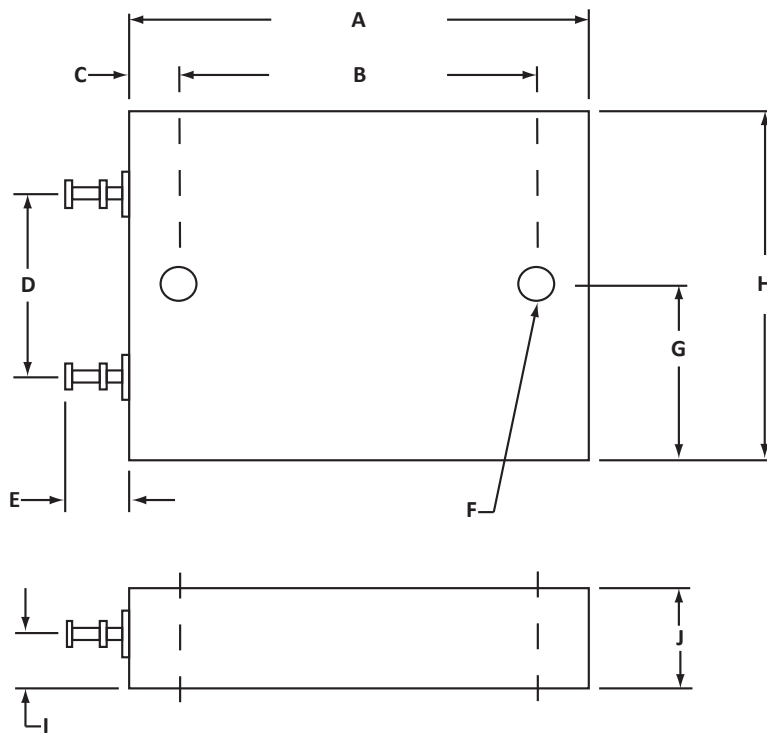


## PACKAGE INFORMATION

## 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

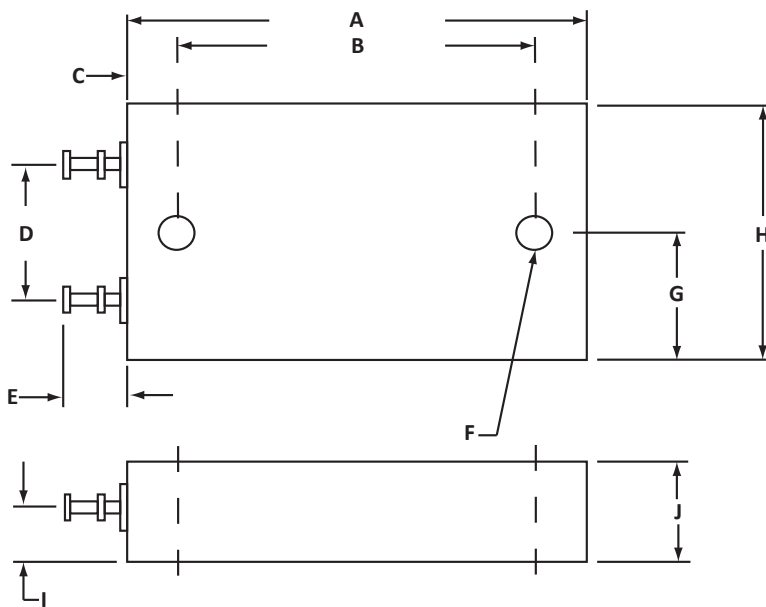
## RTCA DO-160G COMPLIANT PRODUCT

## 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

- 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

- 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.

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