

DESCRIPTION

The 100KS200CNH is 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 device provides reliable protection against power interruptions and shore power switch-over. This module can be screened upon request.

FEATURES

- RTCA DO-160G COMPLIANT PRODUCT
- DOD-STD-1399 & MIL-STD-704A Compliant
- 100 kilowatts Peak Pulse Power per Line (tp = 1.2/50μs)
- Each Device 100% Tested
- 200 Volts Bidirectional

APPLICATIONS

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

MECHANICAL CHARACTERISTICS

- Plastic Encapsulated Sub-Assemblies in a Sealed Epoxy Filled Package
- Approximate Weight: 40 grams
- Flammability Rating UL 94V-0
- Screening Available Upon Request
- Part Marking: Logo, Date Code, Part Number

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}	100	kilowatts
Operating Temperature	T_L	-55 to 150	°C
Storage Temperature	T_{STG}	-55 to 150	°C
Steady State Power Dissipation	-	8.0	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 8/20µs
	V_{WM} VOLTS	@5mA $V_{(BR)}$ VOLTS	@ I_{PP} V_C VOLTS	@ V_{WM} I_D µA	I_{PPM} AMPS
100KS200CNH	180	200	335	0.5	300

FIGURE 1
PEAK PULSE POWER VS PULSE TIME

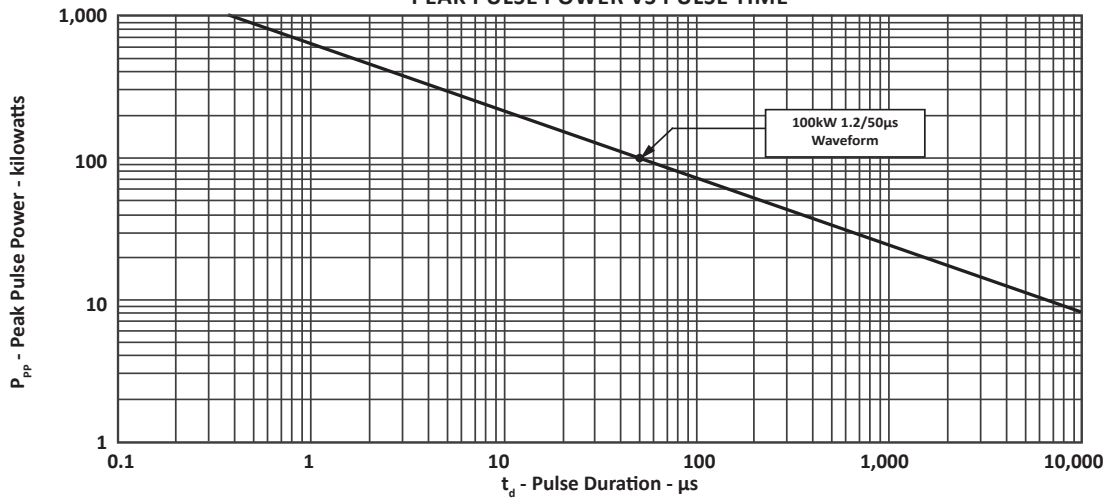


FIGURE 2
PULSE WAVEFORM

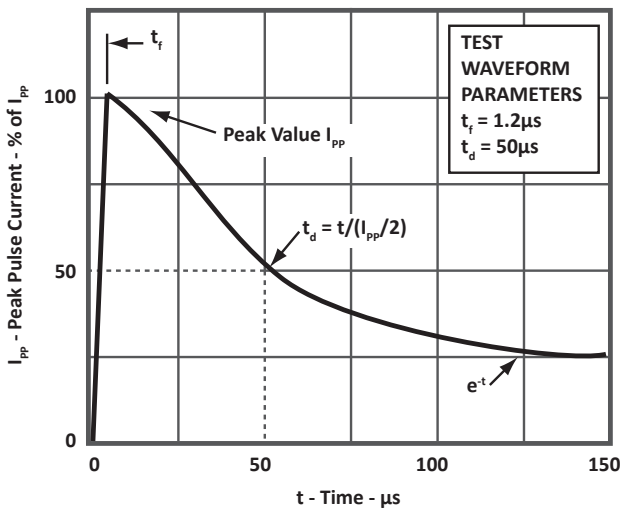
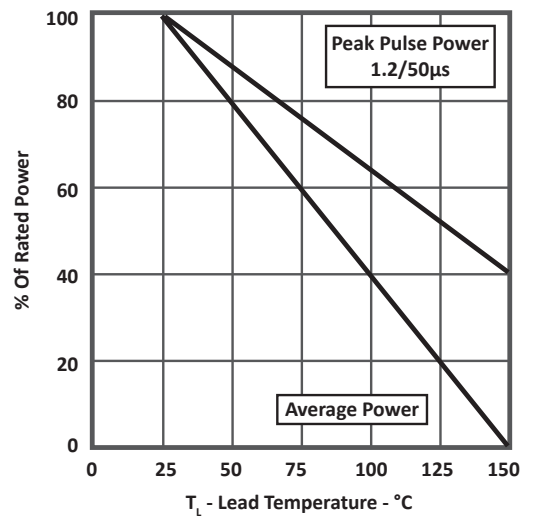


FIGURE 3
POWER DERATING CURVE



PACKAGE INFORMATION

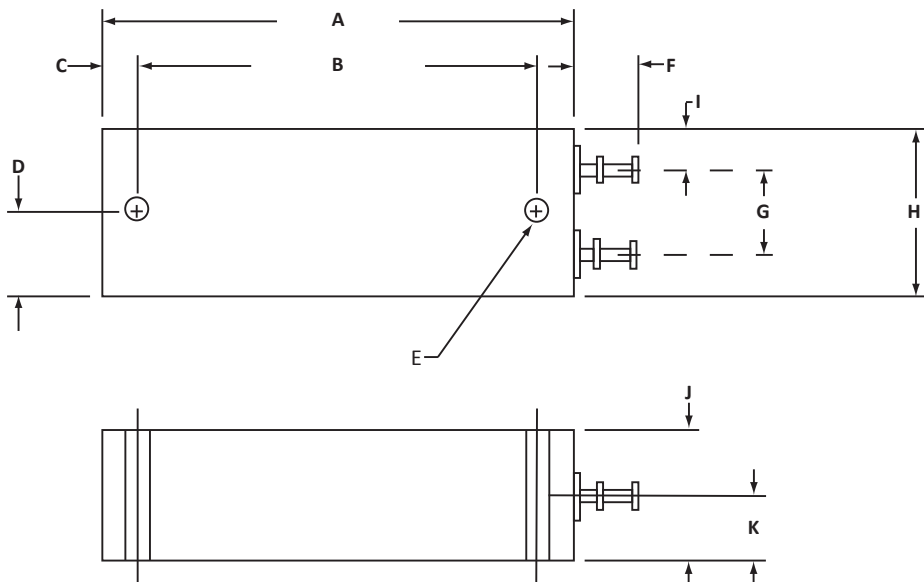
RTCA DO-160G COMPLIANT PRODUCT

OUTLINE 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		0.125 DIA	
F	8.26	9.27	0.325	0.365
G	11.43		0.45	
H	21.84	23.37	0.86	0.92
I	5.59		0.22	
J	16.51	17.53	0.65	0.69
K	8.51		0.335	

NOTES

1. Dimensions "E", "G", "I" and "K" are nominal.



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

In business more than 25 years, ProTek Devices™ is a privately held semiconductor company. The company offers a product line of overvoltage protection and overcurrent protection components. These include transient voltage suppressor array (TVS arrays) avalanche breakdown diode, steering diode TVS array and electronics SMD chip fuses. These components deliver circuit protection in electronic systems from numerous overvoltage and overcurrent events. They include lightning; electrostatic discharge (ESD); nuclear electromagnetic pulses (NEMP); inductive switching; and electromagnetic interference (EMI) / radio frequency interference (RFI). ProTek Devices also offers LED wafer die for ESD protection and related high frequency products. 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

ProTek Devices (Asia Pacific) Pte. Ltd.

8 Ubi Road 2, #06-19
Zervex
Singapore - 408538
Tel: +65-67488312
Fax: +65-67488313

Web

www.protekdevices.com

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