

POWER BUS VOLTAGE SUPPRESSOR**RTCA DO-160G COMPLIANT PRODUCT****APPLICATIONS**

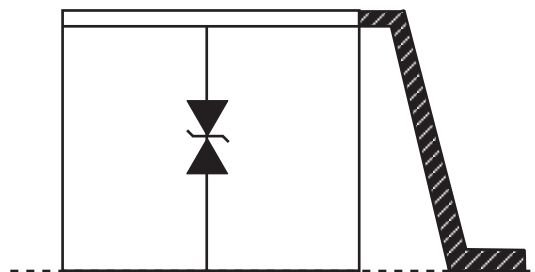
- Power Protection

FEATURES

- 350 kilowatts Peak Pulse Power per Line ($t_p = 10/1000\mu s$)
- 2250 kilowatts Peak Pulse Power per Line ($t_p = 8/20\mu s$)
- Suppresses Transients up to 900kW, Waveform 5A ($t_p = 40/160\mu s$), RCTA/DO-160G Section 22
- 78 Volts Bidirectional
- 15kA ($8/20\mu s$)
- RoHS Complaint (Exemption #7A - High Power Device)

MECHANICAL CHARACTERISTICS

- RTCA DO-160G COMPLIANT PRODUCT
- Lead-Free Silver Plating
- 32mm Tape and Reel Per EIA Standard 481
- Approximate Weight: 9.8 grams
- Flammability Rating UL 94V-0
- Co-planarity < 0.10mm

CIRCUIT DIAGRAM

TYPICAL DEVICE CHARACTERISTICS

RTCA DO-160G COMPLIANT PRODUCT

MAXIMUM RATINGS @ 25°C Unless Otherwise Specified

PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp = 8/20μs)	P_{PP}	2250	kilowatts
Storage Temperature	T_{STG}	-55 to +150	°C
Operating Temperature	T_L	-40 to +125	°C
Peak Pulse Current (tp=8/20μs)	$I_{PP\ MAX}$	15	kA

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

PART NUMBER	MARKING CODE	RATED STAND-OFF VOLTAGE V_{WM} VOLTS	MINIMUM BREAKDOWN VOLTAGE @5mA $V_{(BR)}$ VOLTS	MAXIMUM CLAMPING VOLTAGE (Fig. 2) @ I_{PP} V_C VOLTS	MAXIMUM LEAKAGE CURRENT @ V_{WM} I_D μA	PEAK PULSE CURRENT (Fig. 2) I_{PPM} kAMPS
2700SM78CAN	78CA	78	86	150	10	15

FIGURE 1
PEAK PULSE POWER VS PULSE TIME

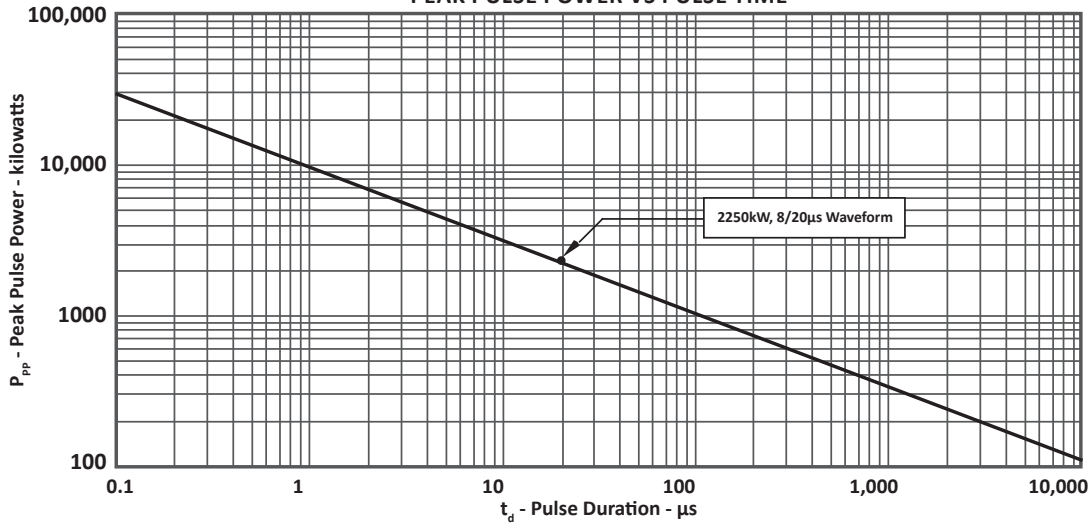


FIGURE 2
PULSE WAVE FORM

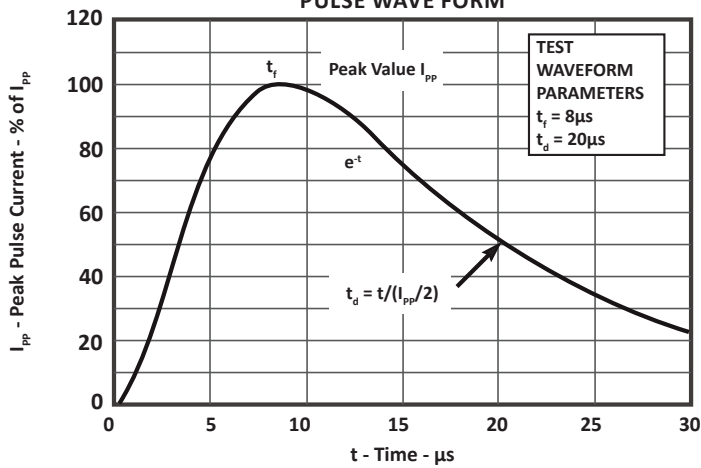
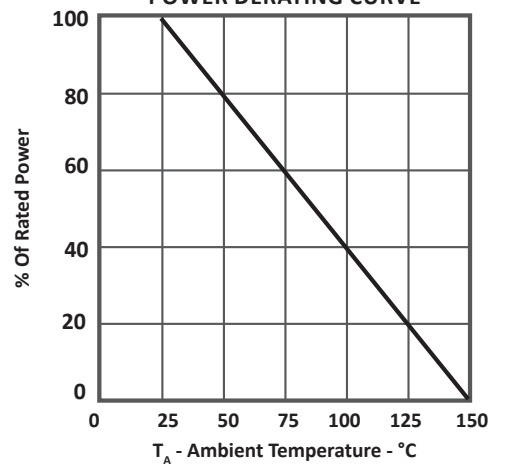


FIGURE 3
POWER DERATING CURVE



PACKAGE INFORMATION

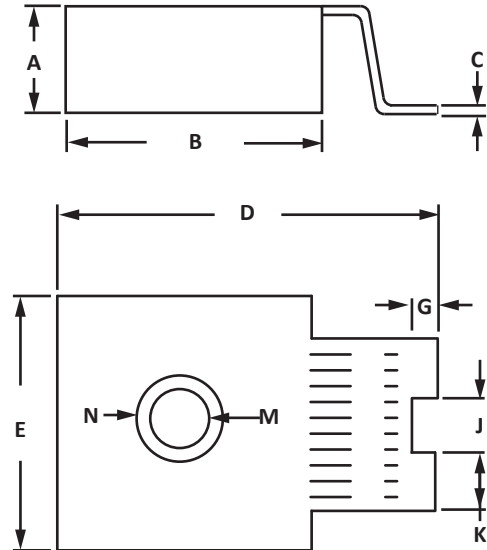
RTCA DO-160G COMPLIANT PRODUCT

OUTLINE DIMENSIONS

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	7.80	8.20	0.307	0.323
B	12.75	13.25	0.502	0.522
C	0.48	0.52	0.019	0.021
D	18.75	19.50	0.738	0.768
E	12.75	13.25	0.502	0.522
G	1.23	1.31	0.048	0.052
J	2.75	2.85	0.108	0.112
K	3.90	3.98	0.154	0.156
M	1.48	1.56	0.058	0.062
N	2.49	2.59	0.098	0.102

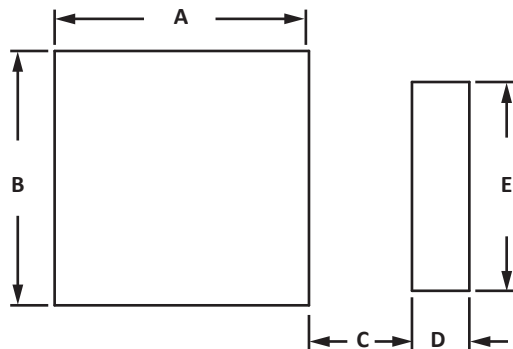
NOTES

1. Controlling dimensions in millimeters.



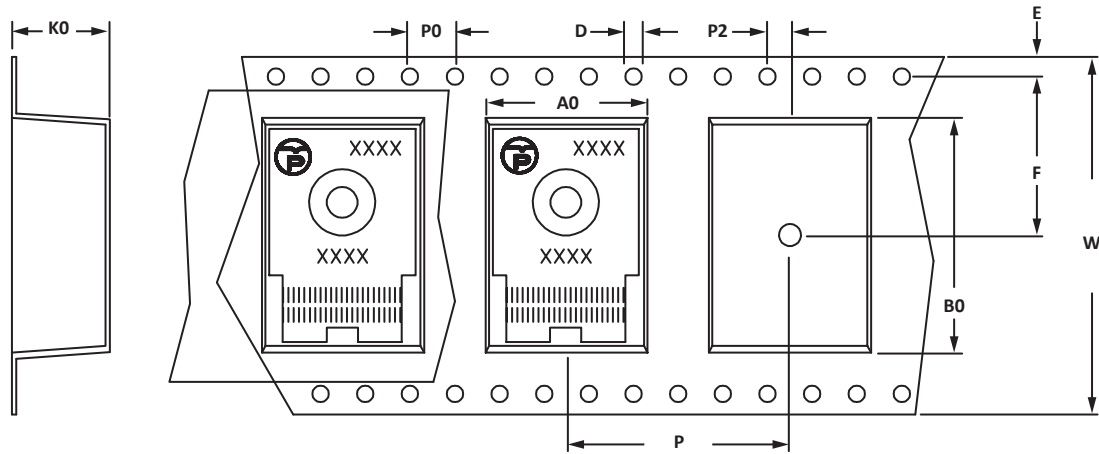
PAD LAYOUT

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	13.45	13.72	0.530	0.540
B	13.45	13.72	0.530	0.540
C	2.44	2.59	0.096	0.102
D	3.50	3.62	0.138	0.142
E	11.16	11.43	0.440	0.450



TAPE AND REEL

RTCA DO-160G COMPLIANT PRODUCT



SPECIFICATIONS

REEL DIA.	TAPE WIDTH	A0	B0	K0	D	E	F	W	P0	P2	P
330mm (13")	32mm	13.89 ± 0.01	19.81 ± 0.01	8.38 ± 0.01	1.50 ± 0.01	1.75 ± 0.01	14.20 ± 0.01	32.00 ± 0.01	4.00 ± 0.01	2.00 ± 0.01	20.00 ± 0.01

NOTES

- Dimensions are in millimeters.
- Surface mount product is taped and reeled in accordance with EIA-481.
- Suffix - T13 = 13" Reel - 250 pieces per 32mm tape.
- Marking on Part - marking code, logo and date code.

ORDERING INFORMATION

BASE PART NUMBER	LEADFREE SUFFIX	TAPE SUFFIX	QTY/REEL	REEL SIZE	TUBE QTY
2700SM78CAN	N/A	-T13	250	13"	N/A

This device is only available in a Lead-Free configuration.

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

In business more than 20 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 high performance interface and linear products. They include analog switches; multiplexers; LED drivers; LED wafer die for ESD protection; audio control ICs; RF and related high frequency products.

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