

TYPICAL DEVICE CHARACTERISTICS

MAXIMUM RATINGS @ 25°C Unless Otherwise Specified

PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp = 8/20μs) - See Figure 1	P _{PP}	250	Watts
Operating Temperature	T _A	-55 to 150	°C
Storage Temperature	T _{STG}	-55 to 150	°C

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified

PART NUMBER (Note 1)	DEVICE MARKING	RATED STAND-OFF VOLTAGE V _{WM} VOLTS	MINIMUM BREAKDOWN VOLTAGE @ 1mA V _(BR) VOLTS	MAXIMUM CLAMPING VOLTAGE (Fig. 2) @ I _p = 1A V _C VOLTS	MAXIMUM CLAMPING VOLTAGE (Fig. 2) @ 8/20μs V _C @ I _{PP}	MAXIMUM LEAKAGE CURRENT (Note 2) @ V _{WM} I _D μA	TYPICAL CAPACITANCE @ 0V, 1MHz C pF
PKFC3.3C	03	3.3	4.0	7.0	12.5V @ 20A	75*	150
PKFC05C	05	5.0	6.0	11.0	14.7V @ 17A	10**	100
PKFC08C	08	8.0	8.5	13.2	19.2V @ 13A	10***	75
PKFC12C	12	12.0	13.3	19.8	29.7V @ 9A	1	50
PKFC15C	15	15.0	16.7	25.4	35.7V @ 7A	1	40
PKFC24C	24	24.0	26.7	37.2	55.0V @ 5A	1	30
PKFC36C	36	36.0	40.0	70.0	84.0V @ 3A	1	25

NOTES

- All devices are bidirectional. Electrical characteristics apply in both directions.
- *Maximum leakage current < 5μA @ 2.8V. **Maximum leakage current < 500nA @ 3.3V. ***Maximum leakage current < 200nA @ 5V.

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FIGURE 1
PEAK PULSE POWER VS PULSE TIME

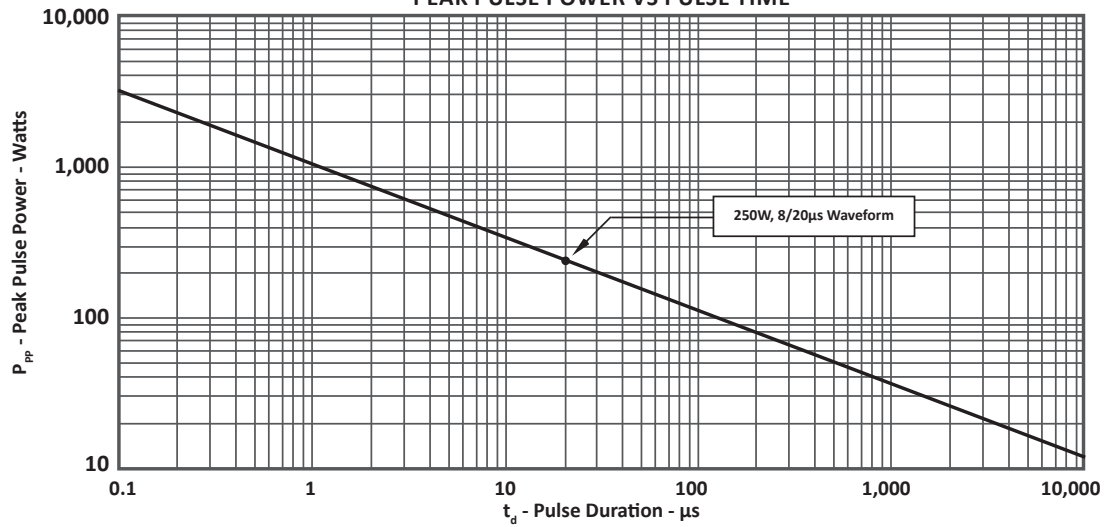


FIGURE 2
PULSE WAVE FORM

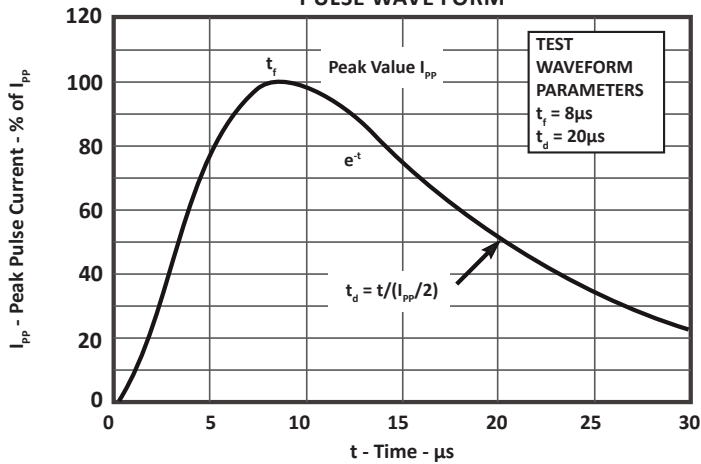
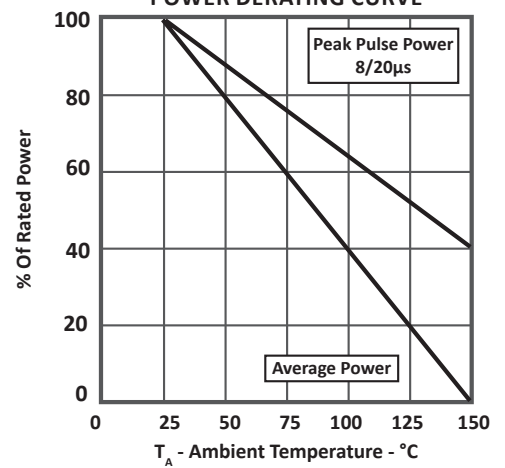


FIGURE 3
POWER DERATING CURVE



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FIGURE 4
OVERSHOOT & CLAMPING VOLTAGE FOR PKFC05C

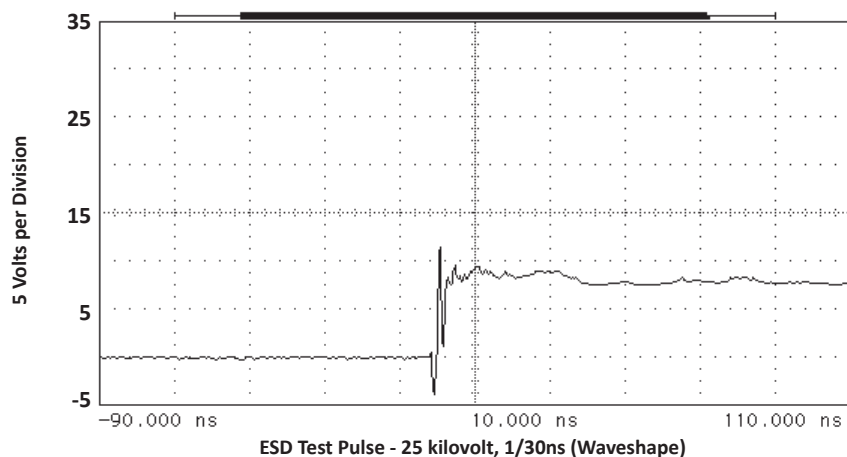
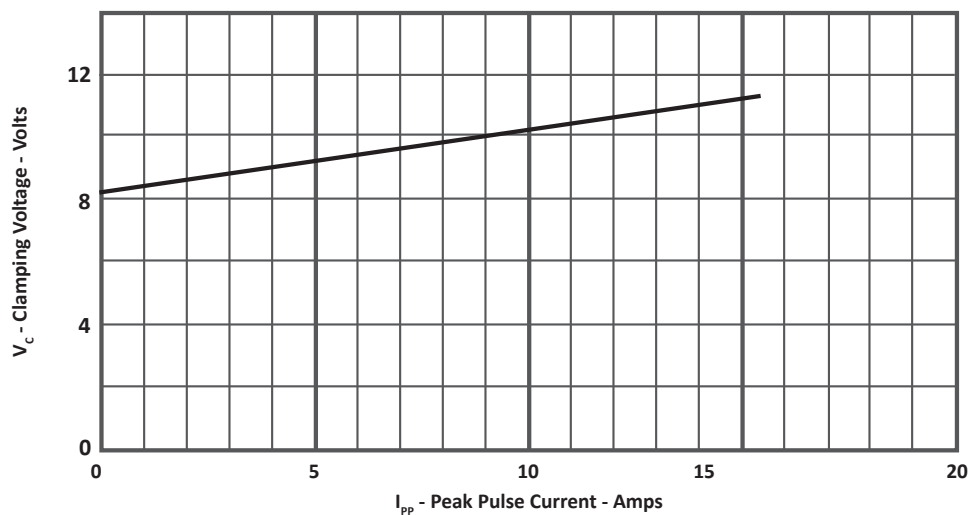


FIGURE 5
TYPICAL CLAMPING VOLTAGE VS PEAK PULSE CURRENT PKFC05C



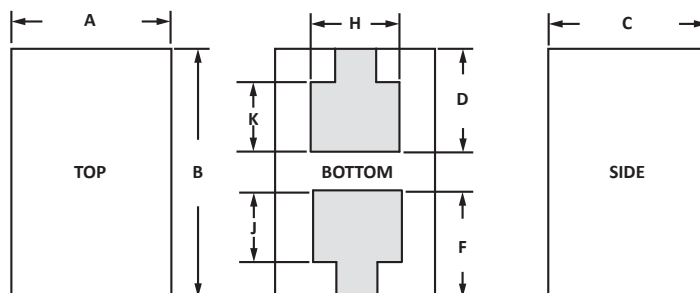
DFN-2 PACKAGE INFORMATION

OUTLINE DIMENSIONS

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.73	0.79	0.029	0.031
B	1.22	1.32	0.048	0.052
C	0.73	0.79	0.029	0.031
D	0.54	0.60	0.021	0.024
F	0.55	0.61	0.022	0.024
G	0.27	0.33	0.11	0.013
H	0.38	0.44	0.015	0.017
J	0.35	0.041	0.014	0.016
K	0.35	0.041	0.014	0.016

NOTES

1. Controlling dimensions in inches.
2. Maximum size 0.052" (1.321mm) by 0.036" (0.914mm)
3. All dimensions ± 0.003 ".

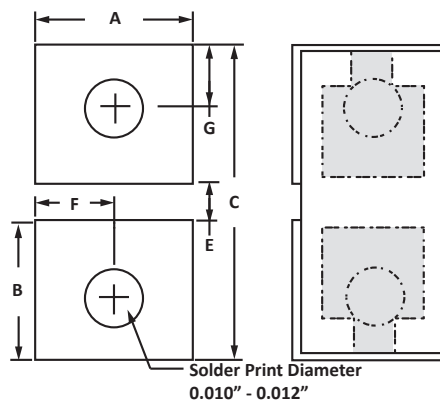


LAYOUT DIMENSIONS

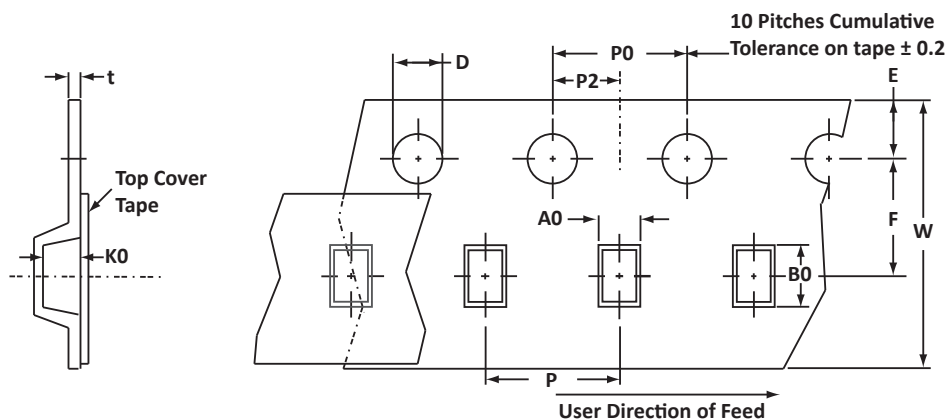
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.00	1.04	0.039	0.041
B	0.62	0.66	0.024	0.026
C	1.44	1.50	0.056	0.060
E	0.18	0.22	0.007	0.009
F	0.49	0.63	0.019	0.021
G	0.31	0.035	0.012	0.014

NOTES

1. Controlling dimensions in inches.
2. All dimensions ± 0.003 ".



TAPE AND REEL INFORMATION



SPECIFICATIONS

REEL DIA.	TAPE WIDTH	A0	B0	K0	D	E	F	W	P0	P2	P	Tmax
178mm(7")	8mm	0.89 ± 0.05	1.47 ± 0.10	0.81 ± 0.05	1.50 ± 0.10	1.75 ± 0.10	3.50 ± 0.05	8.00 ± 0.20	4.00 ± 0.10	2.00 ± 0.05	4.00 ± 0.10	0.25

NOTES

1. Dimensions in millimeters.
2. Top view of tape. Solder pads are face down in tape package.
3. Orientation: preferred stencil - 0.1mm (0.004").
4. Surface mount product is taped and reeled in accordance with EIA 481.
5. 8mm plastic tape: 7" Reels - 5,000.
6. Marking on Reel - part number, date code and lot number.

ORDERING INFORMATION

BASE PART NUMBER (xx = Voltage)	LEADFREE SUFFIX	TAPE SUFFIX	QTY/REEL	REEL SIZE	TUBE QTY
PKFCxxC	-LF	-T75-1	5,000	7"	n/a

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

COMPANY INFORMATION

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 ISO 9001:2015 certified.

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