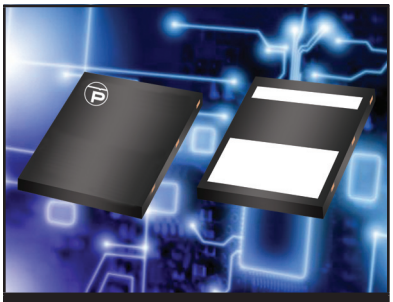
3000 WATT TVS COMPONENT



DFN-2-3KW PACKAGE

DESCRIPTION

The PAM07DF23K24 is high-powered surface mount transient voltage suppression component designed to protect automotive systems from the damaging effects of high voltage spikes. The DFN-2-3KW surface mount package configuration provides a lower profile at a reduce cost. This device provide 3,000 Watts of peak pulse power dissipation for an 10/1000µs waveform.

FEATURES

- IEC Compatibility 61000-4-5 (Surge): 48A, 8/20µs - L3(Line-Ground), L4(Line-Line) & L1 (Power)
- 3,000 Watts Peak Pulse Power per Line (tp = 10/1000µs)
- Unidirectional Configuration
- Easy Mounting to Printed Circuit Board
- RoHS Compliant
- REACH Compliant

APPLICATIONS

- Automotive Applications

MECHANICAL CHARACTERISTICS

- Molded DFN2-3KW
- Approximate Weight: 2.5 grams
- Lead-Free Silver Plating
- Solder Reflow Temperature: 260-270°C
- 12mm Tape and Reel Per EIA Standard 481
- Flammability Rating UL 94V-0

CIRCUIT DIAGRAM



TYPICAL DEVICE CHARACTERISTICS

MAXIMUM RATINGS @ 25°C Unless Otherwise Specified			
PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp = 10/1000µs) - See Figure 1	P_{PP}	3,000	Watts
Storage Temperature	T_{STG}	-55 to 150	°C
Operating Temperature	T_L	-55 to 150	°C

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified						
PART NUMBER	MARKING CODE	RATED STAND-OFF VOLTAGE	MINIMUM BREAKDOWN VOLTAGE		MAXIMUM LEAKAGE CURRENT	MAXIMUM CLAMPING VOLTAGE (Fig. 2)
			MIN			
		V_{WM} VOLTS	$V_{(BR)}$ VOLTS	@I_T mA	@V_{WM} I_D µA	@ 10/1000µs V_C @ I_{PP}
PAM07DF23K24	3U24	24	26.7	1	3	43.0V @ 69.8A

TYPICAL DEVICE CHARACTERISTICS

FIGURE 1
PEAK PULSE POWER VS PULSE TIME

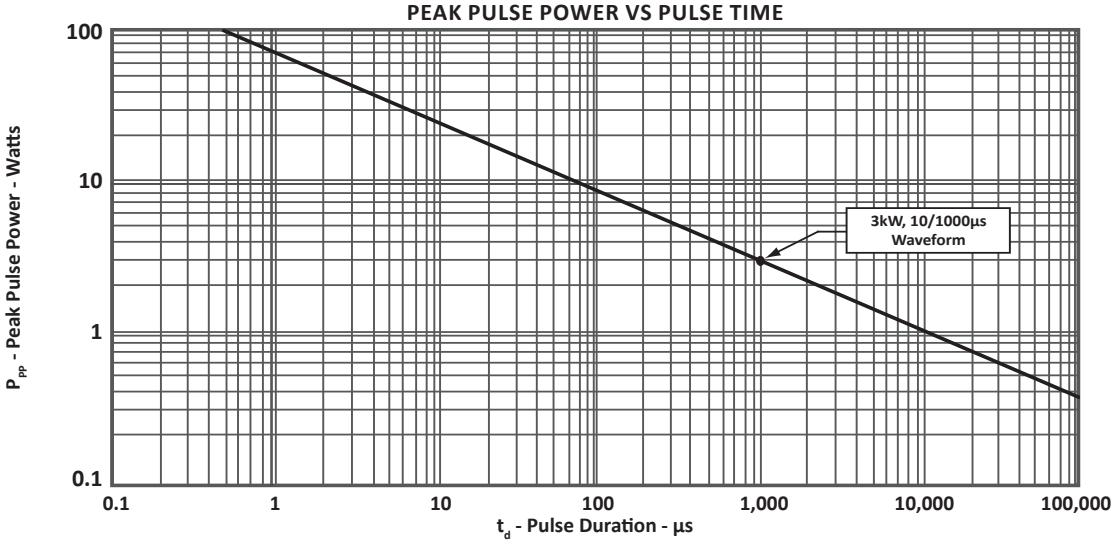
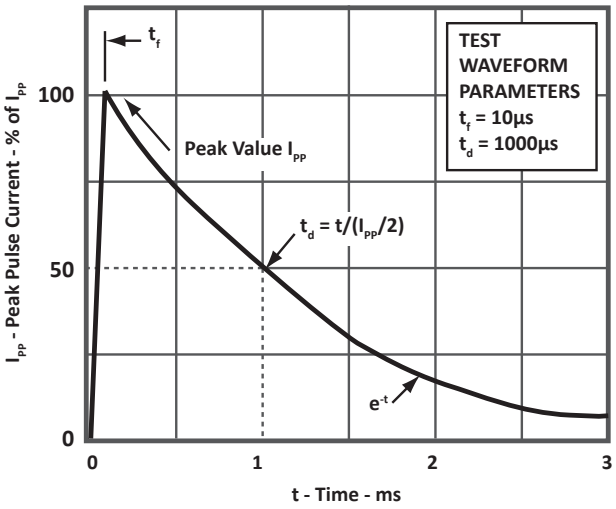


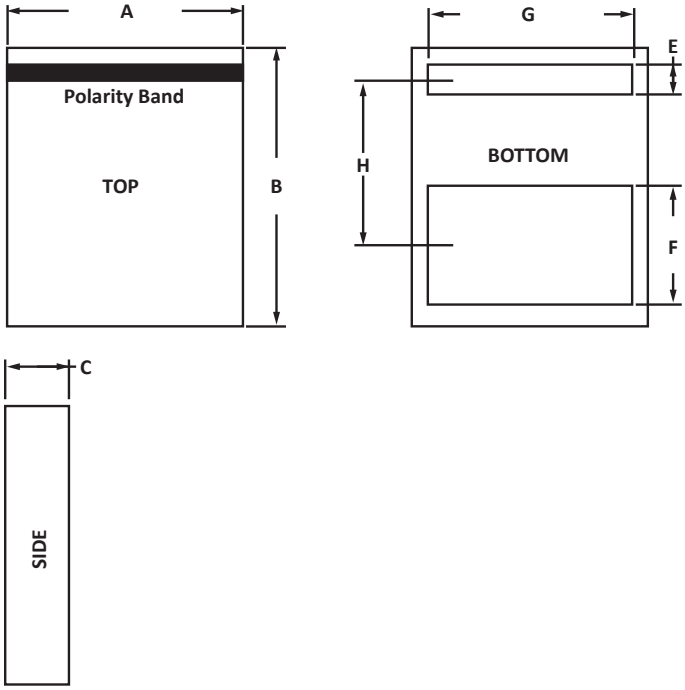
FIGURE 2
PULSE WAVEFORM



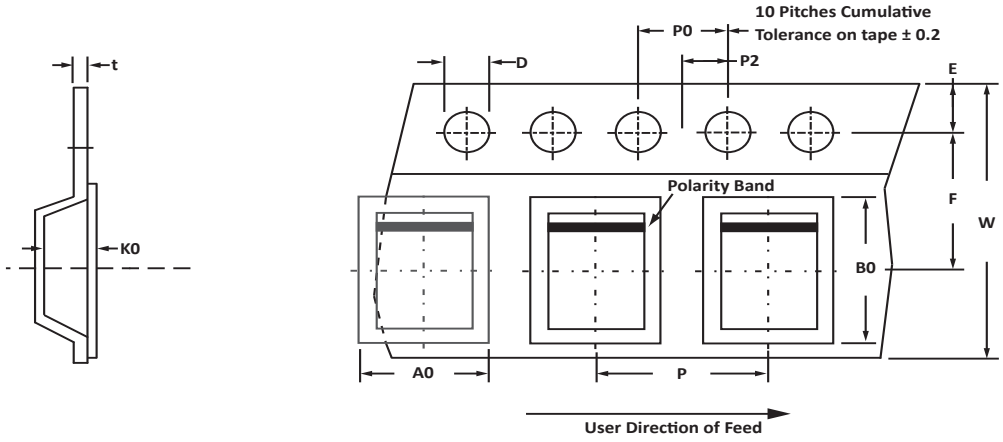
DFN-2-3KW PACKAGE INFORMATION

OUTLINE DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	5.44	5.64	0.214	0.222
B	6.45	6.65	0.248	0.262
C	1.16	1.32	0.046	0.052
E	0.66	0.86	0.026	0.034
F	1.93	2.13	0.076	0.084
G	3.91	4.11	0.154	0.162
H	4.27	4.37	0.168	0.172

NOTES
1. Dimensioning and tolerances per ANSI Y14.M, 1985.
2. Controlling dimension: millimeters.
3. Dimensions are exclusive of mold flash and metal burrs.



TAPE AND REEL



SPECIFICATIONS												
REEL DIA.	TAPE WIDTH	A0	B0	K0	D	E	F	W	P0	P2	P	tmax
330mm (13")	12mm	5.92 ± 0.10	6.93 ± 0.05	1.65 ± 0.05	1.50 ± 0.10	1.75 ± 0.10	3.50 ± 0.05	12.00 ± 0.30	4.00 ± 0.10	2.00 ± 0.05	8.00 ± 0.10	0.25

NOTES
1. Dimensions are in millimeters.
2. Surface mount product is taped and reeled in accordance with EIA-481.
3. Suffix - T13 = 13" Reel - 2,500 pieces per 12mm tape.
4. Marking on Part - marking code (see page 2).

Package outline per document number 06096.R0 10/11.

ORDERING INFORMATION					
BASE PART NUMBER	LEADFREE SUFFIX	TAPE SUFFIX	QTY/REEL	REEL SIZE	TUBE QTY
PAM07DF23K24	n/a	-T13	2,500	13"	n/a

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

COMPANY INFORMATION

COMPANY PROFILE

ProTek Devices, based in Tempe, Arizona USA, is a manufacturer of Transient Voltage Suppression (TVS) products designed specifically for the protection of electronic systems from the effects of lightning, Electrostatic Discharge (ESD), Nuclear Electromagnetic Pulse (NEMP), inductive switching and EMI/RFI. With over 25 years of engineering and manufacturing experience, ProTek designs TVS devices that provide application specific protection solutions for all electronic equipment/systems.

ProTek Devices Analog Products Division, also manufactures analog interface, control, RF and power management products.

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