5000 WATT TVS COMPONENT



DESCRIPTION

The PAM25DF25Kxx Series are high-powered surface mount transient voltage suppression components designed to protect automotive systems from the damaging effects of high voltage spikes. The DFN-2-5KW surface mount package configuration provides a lower profile at a reduce cost. These devices provide 5,000 Watts of peak pulse power dissipation for an $10/1000\mu s$ waveform.

FEATURES

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

MECHANICAL CHARACTERISTICS

- Molded DFN-2-5KW
- Approximate Weight: 2.5 grams
- Lead-Free Silver Plating
- Solder Reflow Temperature: 260-270°C
- Flammability Rating UL 94V-0

APPLICATIONS

• Automotive Applications

APPLICATION



PAM25DF25K33 & PAM25DF25K36

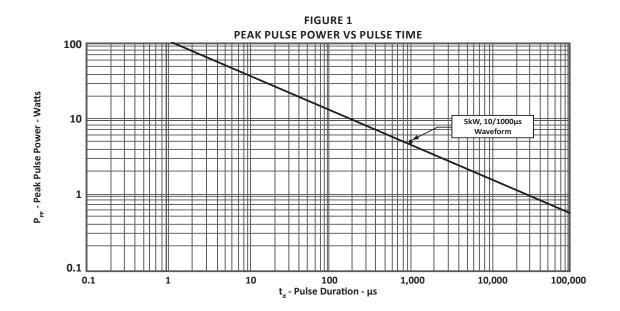
TYPICAL DEVICE CHARACTERISTICS

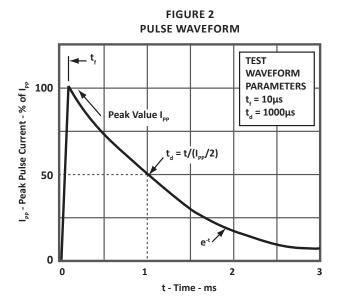
MAXIMUM RATINGS @ 25°C Unless Otherwise Specified							
PARAMETER	SYMBOL	VALUE	UNITS				
Peak Pulse Power (tp = 10/1000µs) - See Figure 1	P _{PP}	5,000	Watts				
Storage Temperature	T _{stg}	-55 to +150	°C				
Operating Temperature	T _L	-55 to +150	°C				

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified								
PART NUMBER	MARKING CODE	RATED STAND-OFF VOLTAGE	BREAK	MUM DOWN TAGE	MAXIMUM LEAKAGE CURRENT	MAXIMUM CLAMPING VOLTAGE		
		V _{wm} VOLTS	MIN V _(BR) VOLTS	@І _т mA	@V _{wм} Ι _D μΑ	(Fig. 2) @ 10/1000μS V _c @ Ι _{ρρ}		
PAM25DF25K33	5U33	33	36.8	5	8	53.3V @ 94.0A		
PAM25DF25K36	5U36	36	40.2	5	8	58.1V @ 86.0A		

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TYPICAL DEVICE CHARACTERISTICS





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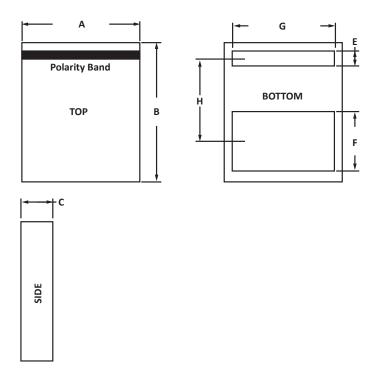


DFN-2-5KW PACKAGE INFORMATION

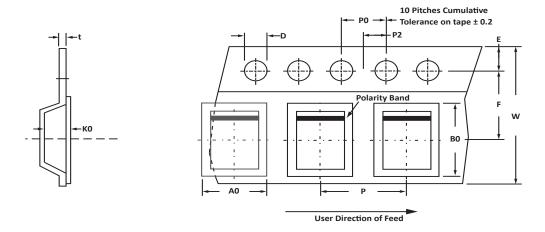
OUTLINE DIMENSIONS							
DIM	MILLIN	IETERS	INCHES				
	MIN	MAX	MIN	MAX			
Α	6.53	6.68	0.257	0.263			
В	7.54	7.70	0.297	0.303			
С	1.22	1.33	0.048	0.052			
Е	0.69	0.84	0.027	0.033			
F	3.05	3.30	0.120	0.130			
G	5.08	5.33	0.200	0.210			
Н	4.70	4.88	0.185	0.192			

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	В0	ко	D	E	F	w	P0	P2	Р	tmax
330mm (13")	16mm	6.98 ± 0.10	8.00 ± 0.10	1.66 ± 0.10	1.50 ± 0.10	1.75 ± 0.10	3.50±0.05	16.00 ± 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 16mm tape.
- 4. Marking on Part marking code (see page 2), date code, logo and polarity band.

Package outline per document number 06098.R0 10/11.

ORDERING INFORMATION							
BASE PART NUMBER (XX=VOLTAGE)	LEADFREE SUFFIX	TAPE SUFFIX	QTY/REEL	REEL SIZE	TUBE QTY		
PAM25DF25Kxx	n/a	-T13	2,500	13"	n/a		
This device is only available in a Lead-Free configuration.							

PAM25DF25K33 & PAM25DF25K36

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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