

P2AL3.3A ~ P2AL40A Series

SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR

Voltage

3.3~40 V

Power

200 W

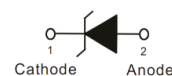
Features

- Ultra thin profile package for space constrained utilization.
- High temperature soldering: 260°C/10 seconds at terminals
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case: Molded plastic, SOD-123FL
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color Band denotes cathode end
- Approx. Weight: 0.0006 ounces, 0.0173 grams

SOD-123FL



Maximum Ratings and Thermal Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
Peak Pulse Power Dissipation($t_p = 10/1000\text{ us}$)	$P_{PP}^{(1,2)}$	200	W
Peak Pulse Current on $t_p = 10/1000\text{ us}$ waveform ^(Fig.2)	$I_{PPM}^{(1)}$	See table 1	A
ESD IEC61000-4-2(Air)	V_{ESD}	± 30	kV
ESD IEC61000-4-2(Contact)		± 30	
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}^{(3)}$	200	$^\circ\text{C/W}$
Operating Junction Temperature Range	T_J	-55~150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65~150	$^\circ\text{C}$



P2AL3.3A ~ P2AL40A Series

Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Part Number	V _{RWM}	V _{BR}			I _R @V _{RWM}	V _C @I _{PP}		Marking Code
		Min.	Max.	I _T				
	V	V	V	mA	uA	V	A	
200W Transient Voltage Suppressor								
P2AL3.3A	3.3	5.2	6	10	50	8.5	23.5	2E1
P2AL5.0A	5	6.4	7	10	25	9.2	21.7	2E2
P2AL6.0A	6	6.67	7.37	10	25	10.3	19.4	2E3
P2AL6.5A	6.5	7.22	7.98	10	20	11.2	17.9	2E4
P2AL7.0A	7	7.78	8.6	10	20	12	16.7	2E5
P2AL7.5A	7.5	8.33	9.21	1	15	12.9	15.5	2E6
P2AL8.0A	8	8.89	9.83	1	2	13.6	14.7	2E7
P2AL8.5A	8.5	9.44	10.4	1	2	14.4	13.9	2E8
P2AL9.0A	9	10	11.1	1	0.5	15.4	13	2E9
P2AL10A	10	11.1	12.3	1	0.5	17	11.8	2EA
P2AL11A	11	12.2	13.5	1	0.5	18.2	11	2EC
P2AL12A	12	13.3	14.7	1	0.5	19.9	10.1	2ED
P2AL13A	13	14.4	15.9	1	0.1	21.5	9.3	2EE
P2AL14A	14	15.6	17.2	1	0.1	23.2	8.6	2EF
P2AL15A	15	16.7	18.5	1	0.1	24.4	8.2	2EH
P2AL16A	16	17.8	19.7	1	0.1	26	7.7	2EJ
P2AL17A	17	18.9	20.9	1	0.1	27.6	7.2	2EK
P2AL18A	18	20	22.1	1	0.1	29.2	6.8	2EL
P2AL20A	20	22.2	24.5	1	0.1	32.4	6.2	2EM
P2AL22A	22	24.4	26.9	1	0.1	35.5	5.6	2EN
P2AL24A	24	26.7	29.5	1	0.1	38.9	5.1	2EP
P2AL26A	26	28.9	31.9	1	0.1	42.1	4.8	2ER
P2AL28A	28	31.1	34.4	1	0.1	45.4	4.4	2ET
P2AL30A	30	33.3	36.8	1	0.1	48.4	4.1	2EU
P2AL33A	33	36.7	40.6	1	0.1	53.3	3.8	2EV
P2AL36A	36	40	44.2	1	0.1	58.1	3.4	2EW
P2AL40A	40	44.4	49.1	1	0.1	64.5	3.1	2EX

NOTES:

1. Non-repetitive current pulse, per Fig.3 and derated above $T_A = 25^\circ\text{C}$ per Fig.2
2. Mounted on 5mm² copper pads to each terminal
3. Mounted on a FR4 PCB, single-sided copper, mini pad

P2AL3.3A ~ P2AL40A Series

TYPICAL CHARACTERISTIC CURVES

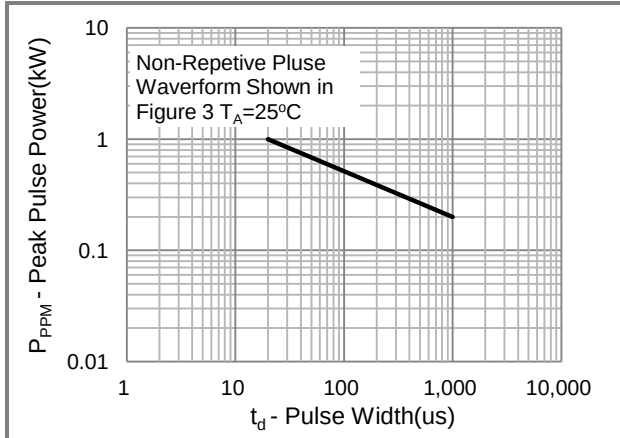


Fig.1 Pulse Power Rating Curve

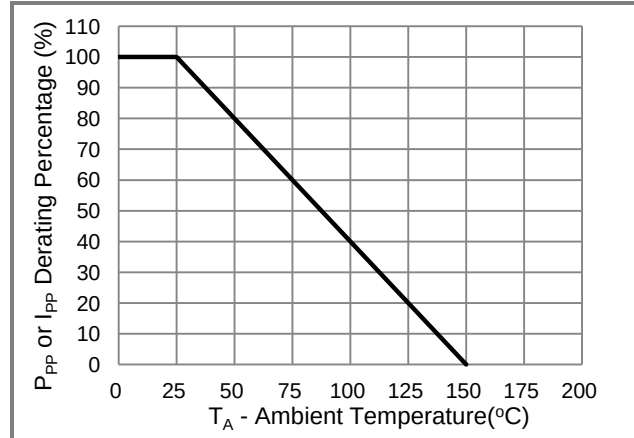


Fig.2 Derating Curve

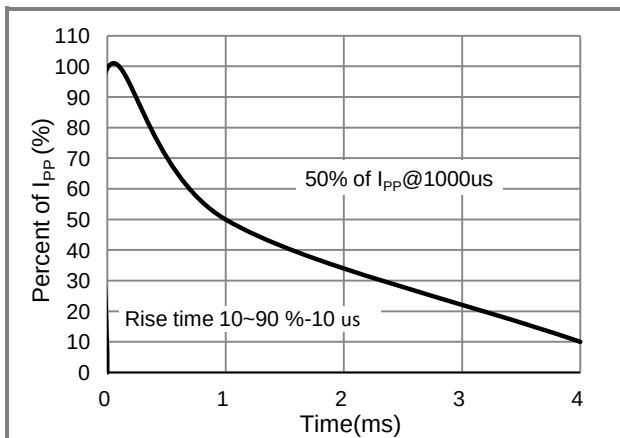


Fig.3 Pulse Waveform

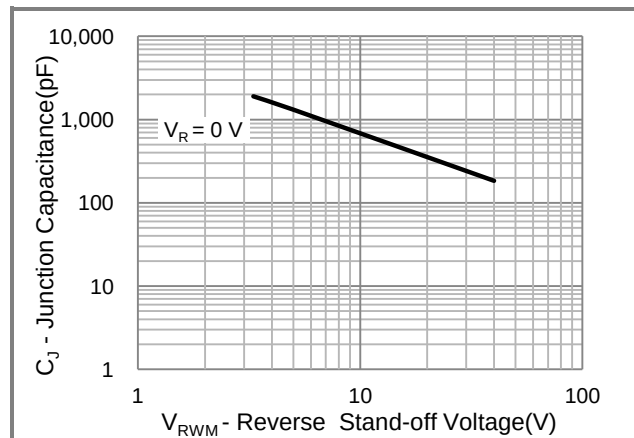


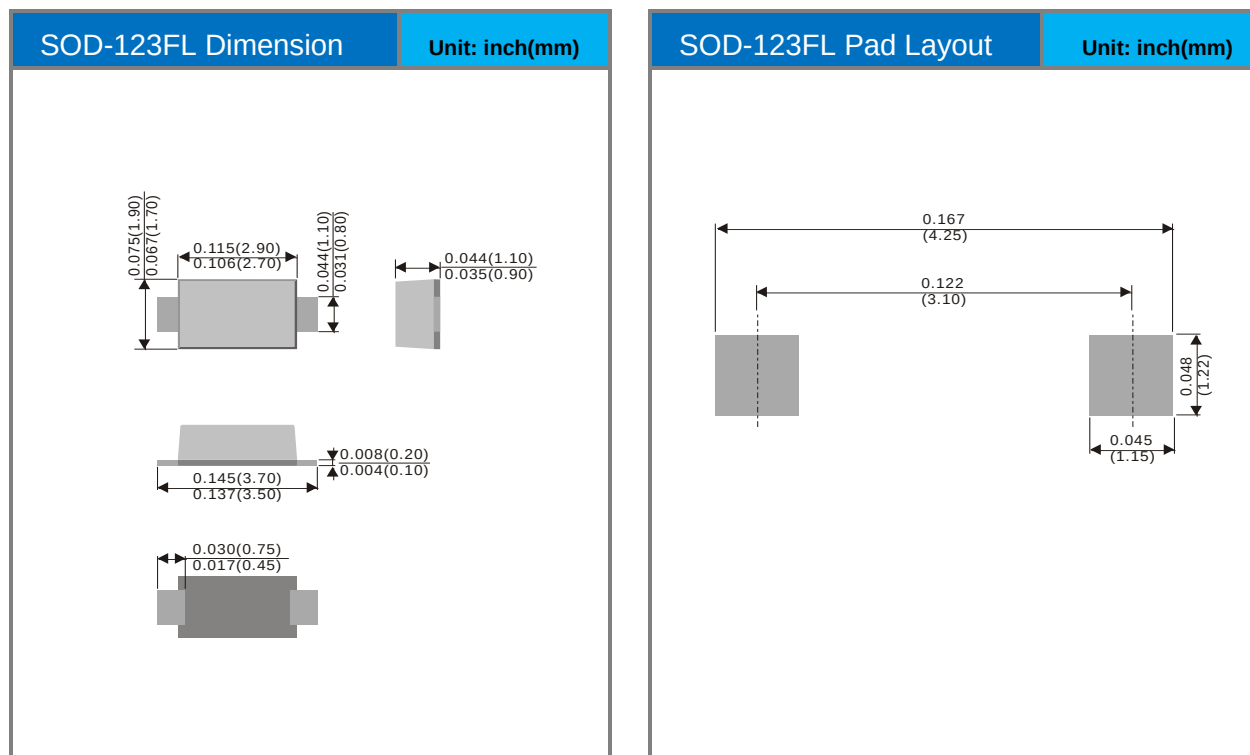
Fig.4 Typical Capacitance

P2AL3.3A ~ P2AL40A Series

Part No Packing Code Version

Part No Packing Code	Package Type	Packing Type	Marking	Version
P2ALxxxA_R1_00001	SOD-123FL	3K pcs / 7" reel	See Table	Halogen free

Packaging Information & Mounting Pad Layout





P2AL3.3A ~ P2AL40A Series

Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Panjit:

[P2AL30A_R1_00001](#) [P2AL30A_R2_00001](#)