THE DATASHEET OF

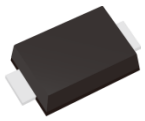
PE42446A-Z

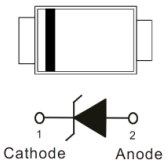
P4FL3.3A ~ P4FL64A Series

SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR

Voltage 3.3~64 V **Power** 400 W

SOD-123FL





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

Maximum Ratings and Thermal Characteristics (T_A = 25°C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
Peak Pulse Power Dissipation(tp = 10/1000 us)	P_{PP} (1,2)	400	W
Peak Pulse Current on tp = 10/1000 us waveform (Fig.2)	I_{PPM} (1)	See table 1	A
ESD IEC61000-4-2(Air) ESD IEC61000-4-2(Contact)	V_{ESD}	±30 ±30	kV
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$ (3)	200	°C/W
Operating Junction Temperature Range	T_J	-55~150	°C
Storage Temperature Range	T_{STG}	-65~150	°C

P4FL3.3A ~ P4FL64A Series

Electrical Characteristics (T_A = 25°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	
400W Transient Voltage Suppressor								
P4FL3.3A	3.3	5.2	6	10	100	8.5	47	4F1
P4FL5.0A	5	6.4	7	10	50	9.2	43.5	4F2
P4FL6.0A	6	6.67	7.37	10	50	10.3	38.8	4F3
P4FL6.5A	6.5	7.22	7.98	10	40	11.2	35.7	4F4
P4FL7.0A	7	7.78	8.6	10	40	12	33.3	4F5
P4FL7.5A	7.5	8.33	9.21	1	30	12.9	31	4F6
P4FL8.0A	8	8.89	9.83	1	5	13.6	29.4	4F7
P4FL8.5A	8.5	9.44	10.4	1	5	14.4	27.8	4F8
P4FL9.0A	9	10	11.1	1	0.5	15.4	26	4F9
P4FL10A	10	11.1	12.3	1	0.5	17	23.5	4FA
P4FL11A	11	12.2	13.5	1	0.5	18.2	22	4FB
P4FL12A	12	13.3	14.7	1	0.5	19.9	20.1	4FC
P4FL13A	13	14.4	15.9	1	0.1	21.5	18.6	4FD
P4FL14A	14	15.6	17.2	1	0.1	23.2	17.2	4FE
P4FL15A	15	16.7	18.5	1	0.1	24.4	16.4	4FF
P4FL16A	16	17.8	19.7	1	0.1	26	15.4	4FH
P4FL17A	17	18.9	20.9	1	0.1	27.6	14.5	4FJ
P4FL18A	18	20	22.1	1	0.1	29.2	13.7	4FK
P4FL20A	20	22.2	24.5	1	0.1	32.4	12.3	4FL
P4FL22A	22	24.4	26.9	1	0.1	35.5	11.3	4FM
P4FL24A	24	26.7	29.5	1	0.1	38.9	10.3	4FN
P4FL26A	26	28.9	31.9	1	0.1	42.1	9.5	4FP
P4FL28A	28	31.1	34.4	1	0.1	45.4	8.8	4FR
P4FL30A	30	33.3	36.8	1	0.1	48.4	8.3	4FT
P4FL33A	33	36.7	40.6	1	0.1	53.3	7.5	4FU
P4FL36A	36	40	44.2	1	0.1	58.1	6.9	4FV
P4FL40A	40	44.4	49.1	1	0.1	64.5	6.2	4FW
P4FL43A	43	47.8	52.8	1	0.1	69.4	5.8	4FX
P4FL45A	45	50	55.3	1	0.1	72.2	5.5	4FY
P4FL48A	48	53.3	58.9	1	0.1	77.4	5.2	4FZ
P4FL51A	51	56.7	62.7	1	0.1	82.4	4.9	4H1

P4FL3.3A ~ P4FL64A Series

Electrical Characteristics (T_A = 25°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	
400W Transient Voltage Suppressor								
P4FL54A	54	60	66.3	1	0.1	87.1	4.6	4H2
P4FL58A	58	64.4	71.2	1	0.1	93.6	4.3	4H3
P4FL60A	60	66.7	73.7	1	0.1	96.8	4.1	4H4
P4FL64A	64	71.1	78.6	1	0.1	103	3.9	4H5

NOTES:

1. Non-repetitive current pulse, per Fig.3 and derated above T_A = 25°C per Fig.2
2. Mounted on 5mm^2 copper pads to each terminal
3. Mounted on a FR4 PCB, single-sided copper, mini pad
4. TVS is a transient protection device, it is strongly recommended not to use as a Zener

P4FL3.3A ~ P4FL64A Series

TYPICAL CHARACTERISTIC CURVES

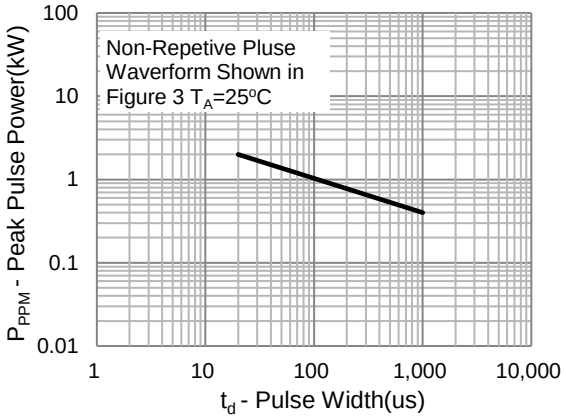


Fig.1 Pulse Power Rating Curve

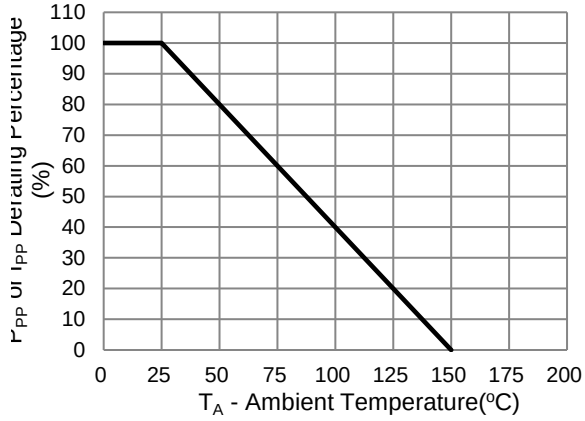


Fig.2 Derating Curve

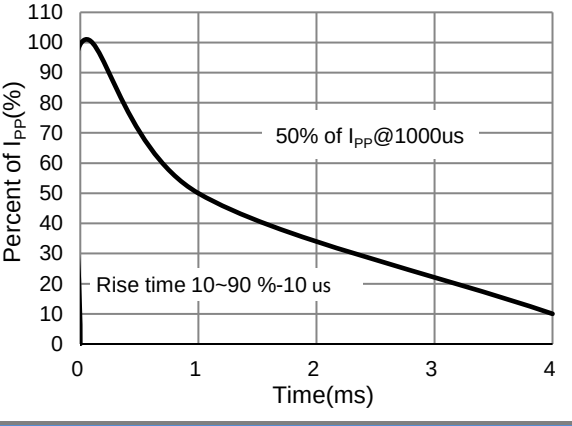


Fig.3 Pulse Waveform

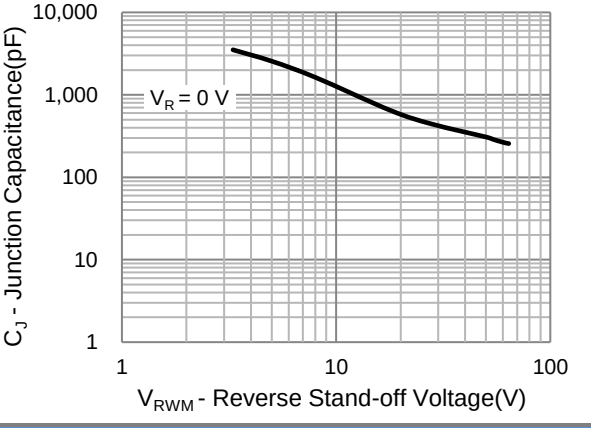


Fig.4 Typical Capacitance

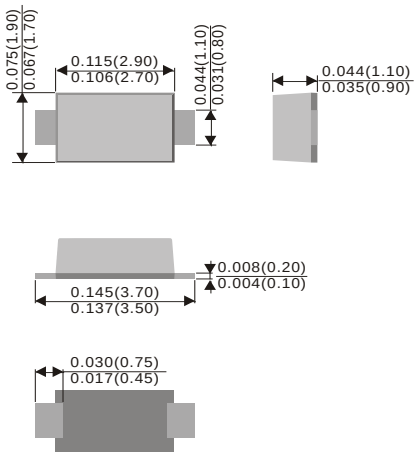
P4FL3.3A ~ P4FL64A Series

Product and Packing Information

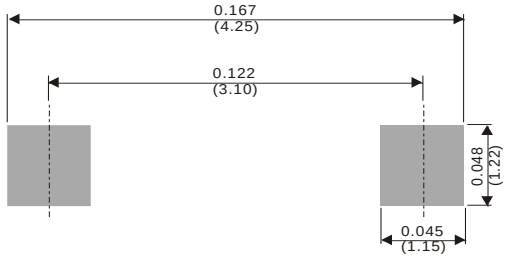
Part No.	Package Type	Packing Type	Marking
P4FLxxxA	SOD-123FL	3K pcs / 7” reel	See Table

Packaging Information & Mounting Pad Layout

SOD-123FL Dimension — Unit: inch(mm)



SOD-123FL Pad Layout — Unit: inch(mm)



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.

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- View PE42446A-Z on WIN SOURCE
- pSemi Information

Optimize Your Supply Chain with WIN SOURCE Solutions

- Global Sourcing Solution
- Obsolete Management
- Cost Control Management
- Shortage Management
- Alternative Solution
- Excess Inventory Management