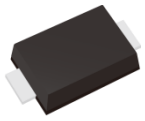
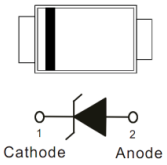
P4FL3.3A ~ P4FL64A Series

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

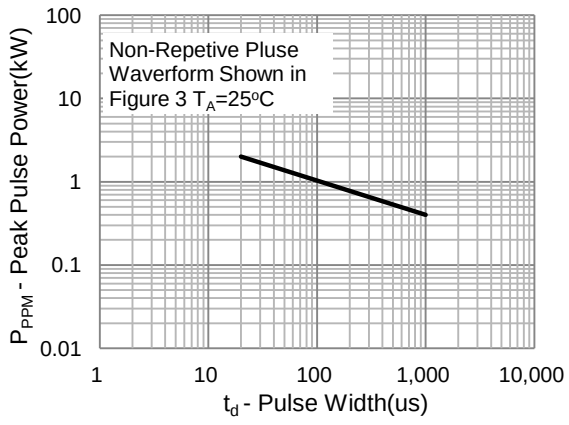


Fig.1 Pulse Power Rating Curve

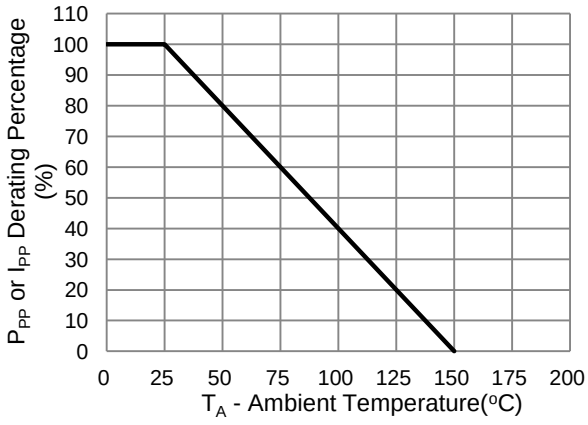


Fig.2 Derating Curve

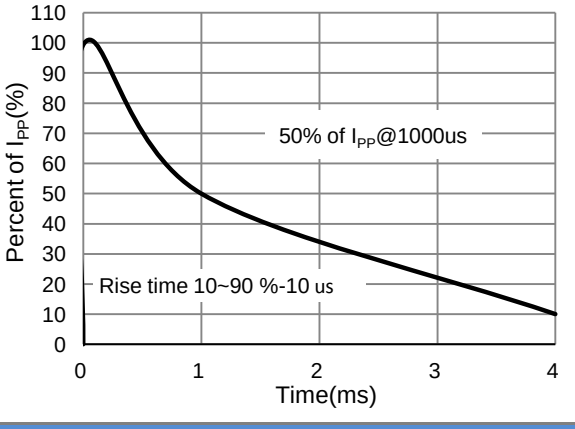


Fig.3 Pulse Waveform

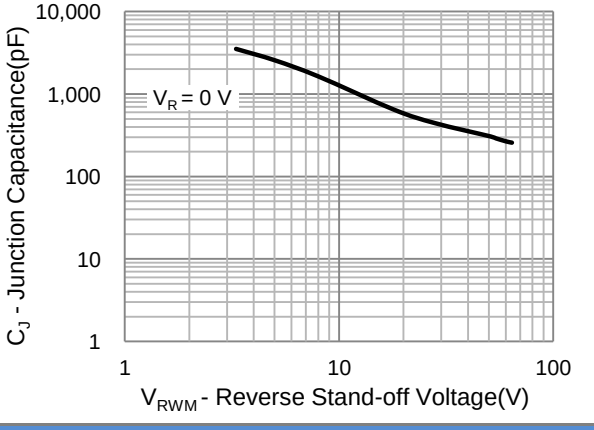


Fig.4 Typical Capacitance

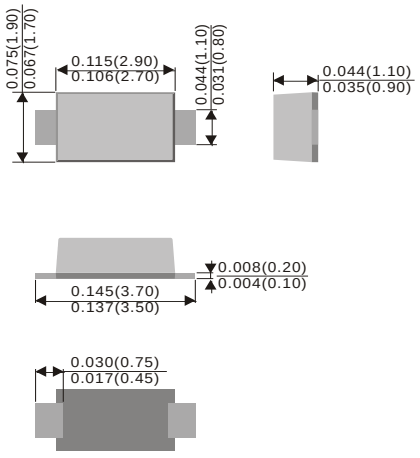
P4FL3.3A ~ P4FL64A Series

Part No Packing Code Version

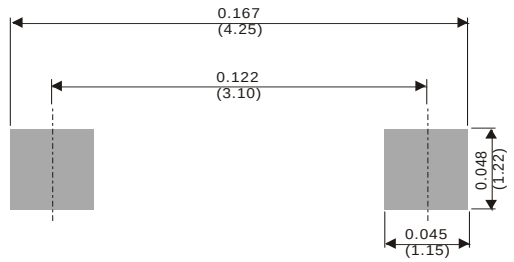
Part No Packing Code	Package Type	Packing Type	Marking	Version
P4FLxxxA_R1_00001	SOD-123FL	3K pcs / 7” reel	See Table	Halogen free

Packaging Information & Mounting Pad Layout

SOD-123FL Dimension — Unit: inch(mm)



SOD-123FL Pad Layout — Unit: inch(mm)



P4FL3.3A ~ P4FL64A Series

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