

**VOLTAGE RANGE: 5.0 - 170V**

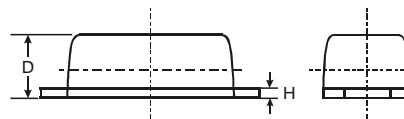
**POWER: 200Watts**

### Features

- For surface mounted applications
- Low profile package
- Low incremental surge resistance, excellent clamping capability
- 200W peak pulse power capability with a 10/1000  $\mu$ s wave from, repetition rate (duty cycle): 0.01%
- High temperature soldering guaranteed: 260 /10 seconds, at terminals

### Mechanical Data

- Case: JEDEC SOD-123FL, molded plastic over passivated chip
- Polarity: Color band denotes positive end (cathode) except for bidirectional
- Mounting position: Any
- Weight: 0.006 ounces, 0.02 gram



SOD-123FL			
Dim	Min	Max	Typ
A	3.58	3.72	3.65
B	2.72	2.78	2.75
C	1.77	1.83	1.80
D	1.02	1.08	1.05
E	0.097	1.03	1.00
H	0.13	0.17	0.15
L	0.53	0.57	0.55
All Dimensions in mm			

### Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Maximum $P_{PK}$ Dissipation (PW - 10/1000 $\mu$ s)	$P_{PK}$	200	W
Maximum $P_{PK}$ Dissipation @ $T_a = 25^\circ\text{C}$ (PW - 8/10 $\mu$ s) (Note 2)	$P_{PK}$	1000	W
DC Power Dissipation @ $T_a = 25^\circ\text{C}$ (Note 3)	$P_D$	385	mW
Derate above $25^\circ\text{C}$		4.0	mW/ $^\circ\text{C}$
Thermal Resistance, Junction to Ambient (Note 3)	$R_{\theta JA}$	325	$^\circ\text{C}/\text{W}$
Thermal Resistance, Junction to Lead (Note 3)	$R_{\theta JL}$	26	$^\circ\text{C}/\text{W}$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150	$^\circ\text{C}$

#### Notes :

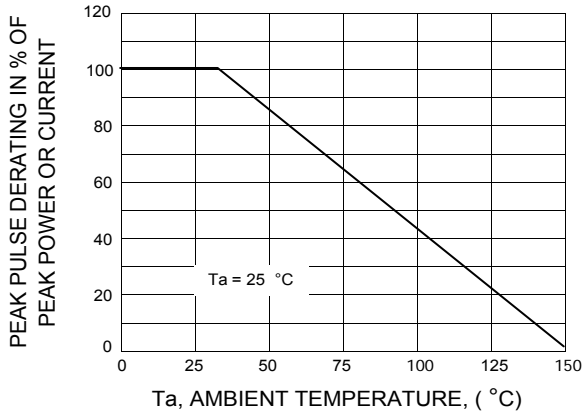
- (1) Non-repetitive current pulse at  $T_a = 25^\circ\text{C}$ , per waveform of Fig. 2.
- (2) Non-repetitive current pulse at  $T_a = 25^\circ\text{C}$ , per waveform of Fig. 5.
- (3) Mounted with recommended minimum pad size, DC board FR4.



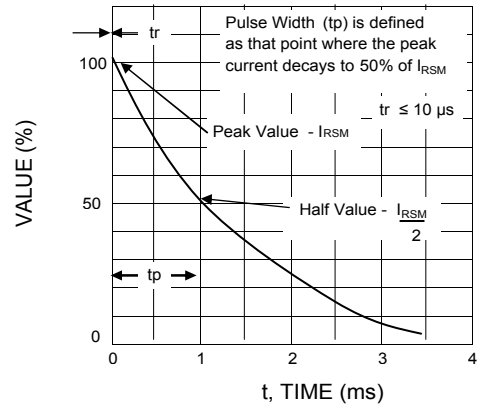
TYPE		Reverse Stand-Off Voltage	Breakdown Voltage Min. @I <sub>T</sub>	Breakdown Voltage Max. @ I <sub>T</sub>	Test Current	Reverse Leakage @V <sub>RWM</sub>	Maximum Clamping Voltage @I <sub>PP</sub>	Peak Pulse Current
(Uni)	(Bi)	V <sub>RWM</sub> (V)	V <sub>BR MIN</sub> (V)	V <sub>BR MAX</sub> (V)	I <sub>T</sub> (mA)	I <sub>R</sub> (uA)	V <sub>C</sub> (V)	I <sub>PP</sub> (mA)
PMF5.0A	PMF5.0CA	5.0	6.40	7.00	10	400	9.2	21.7
PMF6.0A	PMF6.0CA	6.0	6.67	7.37	10	400	10.3	19.4
PMF6.5A	PMF6.5CA	6.5	7.22	7.98	10	250	11.2	17.9
PMF7.0A	PMF7.0CA	7.0	7.78	8.60	10	100	12.0	16.7
PMF7.5A	PMF7.5CA	7.5	8.33	9.21	1.0	50	12.9	15.5
PMF8.0A	PMF8.0CA	8.0	8.89	9.83	1.0	25	13.6	14.7
PMF8.5A	PMF8.5CA	8.5	9.44	10.4	1.0	10	14.4	13.9
PMF9.0A	PMF9.0CA	9.0	10.0	11.1	1.0	5.0	15.4	13.0
PMF10A	PMF10CA	10	11.1	12.3	1.0	2.5	17.0	11.8
PMF11A	PMF11CA	11	12.2	13.5	1.0	2.5	18.2	11.0
PMF12A	PMF12CA	12	13.3	14.7	1.0	2.5	19.9	10.1
PMF13A	PMF13CA	13	14.4	15.9	1.0	1.0	21.5	9.3
PMF14A	PMF14CA	14	15.6	17.2	1.0	1.0	23.2	8.6
PMF15A	PMF15CA	15	16.7	18.5	1.0	1.0	24.4	8.2
PMF16A	PMF16CA	16	17.8	19.7	1.0	1.0	26.0	7.7
PMF17A	PMF17CA	17	18.9	20.9	1.0	1.0	27.6	7.2
PMF18A	PMF18CA	18	20.0	22.1	1.0	1.0	29.2	6.8
PMF20A	PMF20CA	20	22.2	24.5	1.0	1.0	32.4	6.2
PMF22A	PMF22CA	22	24.4	26.9	1.0	1.0	35.5	5.6
PMF24A	PMF24CA	24	26.7	29.5	1.0	1.0	38.9	5.1
PMF26A	PMF26CA	26	28.9	31.9	1.0	1.0	42.1	4.8
PMF28A	PMF28CA	28	31.1	34.4	1.0	1.0	45.4	4.4
PMF30A	PMF30CA	30	33.3	36.8	1.0	1.0	48.4	4.1
PMF33A	PMF33CA	33	36.7	40.6	1.0	1.0	53.3	3.8
PMF36A	PMF36CA	36	40.0	44.2	1.0	1.0	58.1	3.4
PMF40A	PMF40CA	40	44.4	49.1	1.0	1.0	64.5	3.1
PMF43A	PMF43CA	43	47.8	52.8	1.0	1.0	69.4	2.9
PMF45A	PMF45CA	45	50.0	55.3	1.0	1.0	72.7	2.8
PMF48A	PMF48CA	48	53.3	58.9	1.0	1.0	77.4	2.6
PMF51A	PMF51CA	51	56.7	62.7	1.0	1.0	82.4	2.4
PMF54A	PMF54CA	54	60.0	66.3	1.0	1.0	87.1	2.3
PMF58A	PMF58CA	58	64.4	71.2	1.0	1.0	93.6	2.1
PMF60A	PMF60CA	60	66.7	73.7	1.0	1.0	96.8	1.8
PMF64A	PMF64CA	64	71.1	78.6	1.0	1.0	103	1.7
PMF70A	PMF70CA	70	77.8	86.0	1.0	1.0	113	1.5
PMF75A	PMF75CA	75	83.3	92.1	1.0	1.0	121	1.4
PMF78A	PMF78CA	78	86.7	95.8	1.0	1.0	126	1.4
PMF85A	PMF85CA	85	94.4	104	1.0	1.0	137	1.3
PMF90A	PMF90CA	90	100	111	1.0	1.0	146	1.2
PMF100A	PMF100CA	100	111	123	1.0	1.0	162	1.1
PMF110A	PMF110CA	110	122	135	1.0	1.0	177	1.0
PMF120A	PMF120CA	120	133	147	1.0	1.0	193	0.9
PMF130A	PMF130CA	130	144	159	1.0	1.0	209	0.8
PMF150A	PMF150CA	150	167	185	1.0	1.0	243	0.7
PMF160A	PMF160CA	160	178	197	1.0	1.0	259	0.7
PMF170A	PMF170CA	170	189	209	1.0	1.0	275	0.6



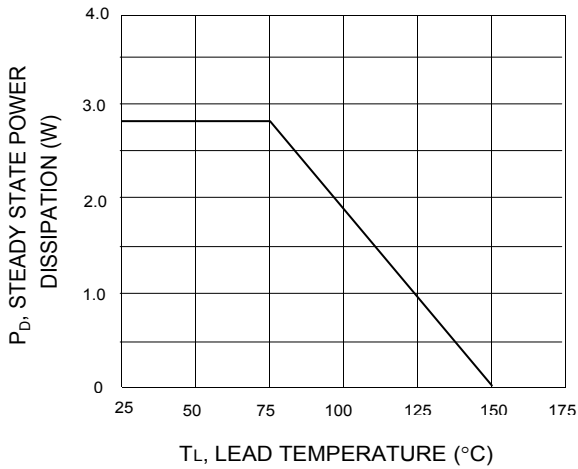
**FIG.1 - PULSE DERATING CURVE**



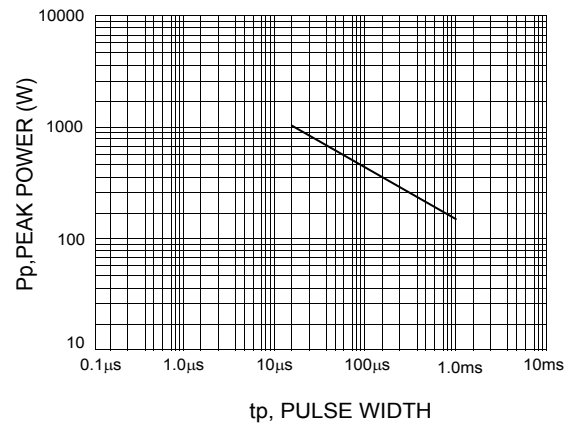
**FIG.2 - 10 x 1000 μs PULSE WAVEFORM**



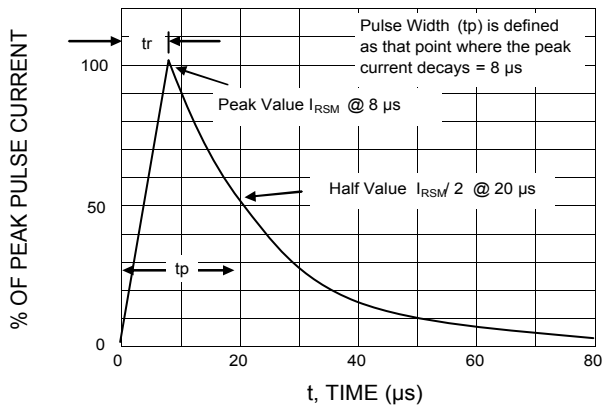
**FIG.3 - STEADY STATE POWER DERATING**



**FIG.4 - PULSE RATING CURVE**



**FIG.5 - 8 x 20 μs PULSE WAVEFORM**



**FIG. 6 - CAPACITANCE VS. WORKING PEAK REVERSE VOLTAGE**

