

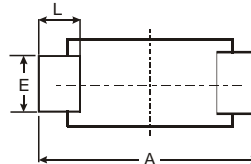
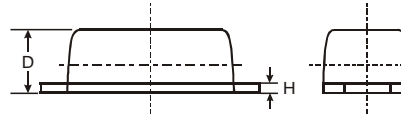
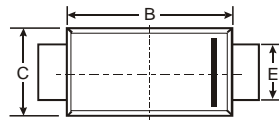
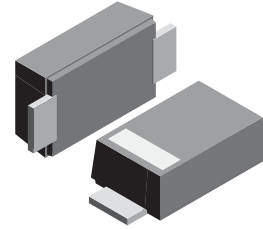
**VOLTAGE RANGE: 5.0 - 170V**  
**POWER: 200Watts**

### 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: 0.0007 ounce, 0.02 grams



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

Rating at 25 °C ambient temperature 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 °C		4.0	mW/°C
Thermal Resistance, Junction to Ambient (Note 3)	$R_{\theta JA}$	325	°C/W
Thermal Resistance, Junction to Lead (Note 3)	$R_{\theta JL}$	26	°C/W
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150	°C

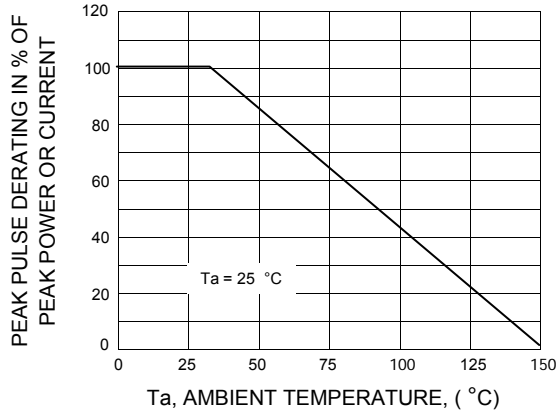
#### Notes :

- (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.

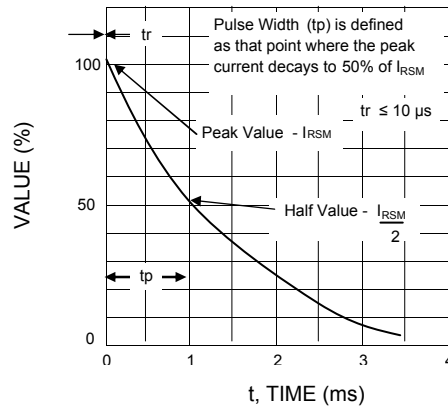
Type		Reverse Stand-Off Voltage	Breakdown Voltage Min. @I <sub>T</sub>	Breakdown Voltage Max. @ I <sub>T</sub>	Test Current	Reverse Leakage @V <sub>RWM</sub>	Maximum Clamping Voltage @I <sub>PP</sub>	Peak Pulse Current
(Uni)	(Bi)	V <sub>RWM</sub> (V)	V <sub>BR MIN</sub> (V)	V <sub>BR MAX</sub> (V)	I <sub>T</sub> (mA)	I <sub>R</sub> (uA)	V <sub>C</sub> (V)	I <sub>PP</sub> (mA)
MMF5.0A	MMF5.0CA	5.0	6.40	7.00	10	400	9.2	21.7
MMF6.0A	MMF6.0CA	6.0	6.67	7.37	10	400	10.3	19.4
MMF6.5A	MMF6.5CA	6.5	7.22	7.98	10	250	11.2	17.9
MMF7.0A	MMF7.0CA	7.0	7.78	8.60	10	100	12.0	16.7
MMF7.5A	MMF7.5CA	7.5	8.33	9.21	1.0	50	12.9	15.5
MMF8.0A	MMF8.0CA	8.0	8.89	9.83	1.0	25	13.6	14.7
MMF8.5A	MMF8.5CA	8.5	9.44	10.4	1.0	10	14.4	13.9
MMF9.0A	MMF9.0CA	9.0	10.0	11.1	1.0	5.0	15.4	13.0
MMF10A	MMF10CA	10	11.1	12.3	1.0	2.5	17.0	11.8
MMF11A	MMF11CA	11	12.2	13.5	1.0	2.5	18.2	11.0
MMF12A	MMF12CA	12	13.3	14.7	1.0	2.5	19.9	10.1
MMF13A	MMF13CA	13	14.4	15.9	1.0	1.0	21.5	9.3
MMF14A	MMF14CA	14	15.6	17.2	1.0	1.0	23.2	8.6
MMF15A	MMF15CA	15	16.7	18.5	1.0	1.0	24.4	8.2
MMF16A	MMF16CA	16	17.8	19.7	1.0	1.0	26.0	7.7
MMF17A	MMF17CA	17	18.9	20.9	1.0	1.0	27.6	7.2
MMF18A	MMF18CA	18	20.0	22.1	1.0	1.0	29.2	6.8
MMF20A	MMF20CA	20	22.2	24.5	1.0	1.0	32.4	6.2
MMF22A	MMF22CA	22	24.4	26.9	1.0	1.0	35.5	5.6
MMF24A	MMF24CA	24	26.7	29.5	1.0	1.0	38.9	5.1
MMF26A	MMF26CA	26	28.9	31.9	1.0	1.0	42.1	4.8
MMF28A	MMF28CA	28	31.1	34.4	1.0	1.0	45.4	4.4
MMF30A	MMF30CA	30	33.3	36.8	1.0	1.0	48.4	4.1
MMF33A	MMF33CA	33	36.7	40.6	1.0	1.0	53.3	3.8
MMF36A	MMF36CA	36	40.0	44.2	1.0	1.0	58.1	3.4
MMF40A	MMF40CA	40	44.4	49.1	1.0	1.0	64.5	3.1
MMF43A	MMF43CA	43	47.8	52.8	1.0	1.0	69.4	2.9
MMF45A	MMF45CA	45	50.0	55.3	1.0	1.0	72.7	2.8
MMF48A	MMF48CA	48	53.3	58.9	1.0	1.0	77.4	2.6
MMF51A	MMF51CA	51	56.7	62.7	1.0	1.0	82.4	2.4
MMF54A	MMF54CA	54	60.0	66.3	1.0	1.0	87.1	2.3
MMF58A	MMF58CA	58	64.4	71.2	1.0	1.0	93.6	2.1
MMF60A	MMF60CA	60	66.7	73.7	1.0	1.0	96.8	1.8
MMF64A	MMF64CA	64	71.1	78.6	1.0	1.0	103	1.7
MMF70A	MMF70CA	70	77.8	86.0	1.0	1.0	113	1.5
MMF75A	MMF75CA	75	83.3	92.1	1.0	1.0	121	1.4
MMF78A	MMF78CA	78	86.7	95.8	1.0	1.0	126	1.4
MMF85A	MMF85CA	85	94.4	104	1.0	1.0	137	1.3
MMF90A	MMF90CA	90	100	111	1.0	1.0	146	1.2
MMF100A	MMF100CA	100	111	123	1.0	1.0	162	1.1
MMF110A	MMF110CA	110	122	135	1.0	1.0	177	1.0
MMF120A	MMF120CA	120	133	147	1.0	1.0	193	0.9
MMF130A	MMF130CA	130	144	159	1.0	1.0	209	0.8
MMF150A	MMF150CA	150	167	185	1.0	1.0	243	0.7
MMF160A	MMF160CA	160	178	197	1.0	1.0	259	0.7
MMF170A	MMF170CA	170	189	209	1.0	1.0	275	0.6

## RATING AND CHARACTERISTIC CURVES ( MMF5.0A - MMF170A )

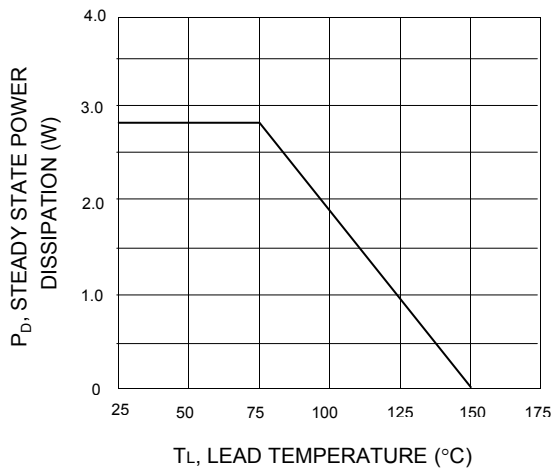
**FIG.1 - PULSE DERATING CURVE**



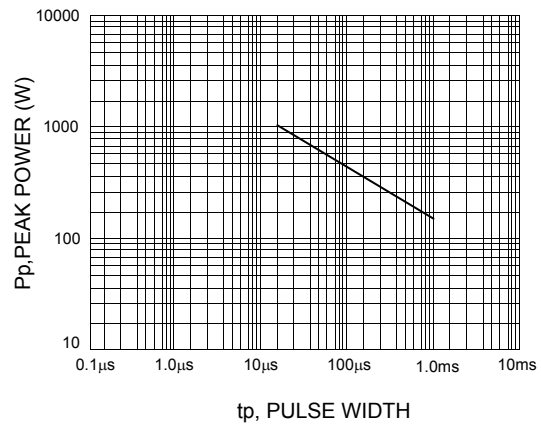
**FIG.2 - 10 x 1000  $\mu s$  PULSE WAVEFORM**



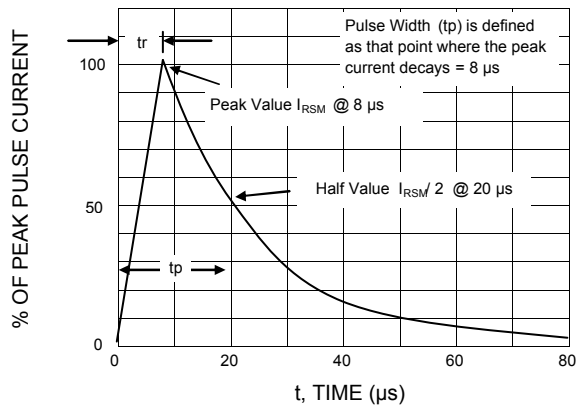
**FIG.3 - STEADY STATE POWER DERATING**



**FIG.4 - PULSE RATING CURVE**



**FIG.5 - 8 x 20  $\mu s$  PULSE WAVEFORM**



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

