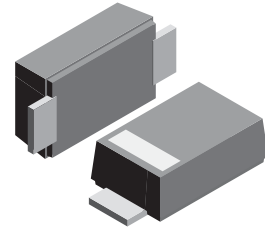


VOLTAGE RANGE: 5.0 - 170V
POWER: 200Watts

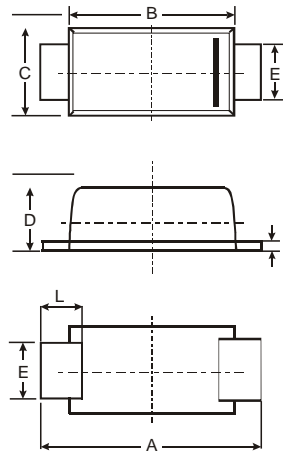
Features

- For surface mounted applications
- Low profile package
- Low incremental surge resistance, excellent clamping capability
- 200W peak pulse power capability with a 10/1000 μ 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	3.50	3.80	3.65
B	2.60	2.90	2.75
C	1.70	1.90	1.80
D	0.09	1.10	1.00
E	0.08	1.10	0.095
H	0.12	0.20	0.16
L	0.07	0.09	0.08
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 μ s)	P_{PK}	200	W
Maximum P_{PK} Dissipation @ $T_a = 25^\circ\text{C}$ (PW - 8/10 μ 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/ $^\circ\text{C}$
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 _T	Breakdown Voltage Max. @ I _T	Test Current	Reverse Leakage @V _{RWM}	Maximum Clamping Voltage @I _{PP}	Peak Pulse Current
(Uni)	(Bi)	V _{RWM} (V)	V _{BR MIN} (V)	V _{BR MAX} (V)	I _T (mA)	I _R (uA)	V _C (V)	I _{PP} (A)
SODJ5.0A	SODJ5.0CA	5.0	6.40	7.00	10	400	9.2	21.7
SODJ6.0A	SODJ6.0CA	6.0	6.67	7.37	10	400	10.3	19.4
SODJ6.5A	SODJ6.5CA	6.5	7.22	7.98	10	250	11.2	17.9
SODJ7.0A	SODJ7.0CA	7.0	7.78	8.60	10	100	12.0	16.7
SODJ7.5A	SODJ7.5CA	7.5	8.33	9.21	1.0	50	12.9	15.5
SODJ8.0A	SODJ8.0CA	8.0	8.89	9.83	1.0	25	13.6	14.7
SODJ8.5A	SODJ8.5CA	8.5	9.44	10.4	1.0	10	14.4	13.9
SODJ9.0A	SODJ9.0CA	9.0	10.0	11.1	1.0	5.0	15.4	13.0
SODJ10A	SODJ10CA	10	11.1	12.3	1.0	2.5	17.0	11.8
SODJ11A	SODJ11CA	11	12.2	13.5	1.0	2.5	18.2	11.0
SODJ12A	SODJ12CA	12	13.3	14.7	1.0	2.5	19.9	10.1
SODJ13A	SODJ13CA	13	14.4	15.9	1.0	1.0	21.5	9.3
SODJ14A	SODJ14CA	14	15.6	17.2	1.0	1.0	23.2	8.6
SODJ15A	SODJ15CA	15	16.7	18.5	1.0	1.0	24.4	8.2
SODJ16A	SODJ16CA	16	17.8	19.7	1.0	1.0	26.0	7.7
SODJ17A	SODJ17CA	17	18.9	20.9	1.0	1.0	27.6	7.2
SODJ18A	SODJ18CA	18	20.0	22.1	1.0	1.0	29.2	6.8
SODJ20A	SODJ20CA	20	22.2	24.5	1.0	1.0	32.4	6.2
SODJ22A	SODJ22CA	22	24.4	26.9	1.0	1.0	35.5	5.6
SODJ24A	SODJ24CA	24	26.7	29.5	1.0	1.0	38.9	5.1
SODJ26A	SODJ26CA	26	28.9	31.9	1.0	1.0	42.1	4.8
SODJ28A	SODJ28CA	28	31.1	34.4	1.0	1.0	45.4	4.4
SODJ30A	SODJ30CA	30	33.3	36.8	1.0	1.0	48.4	4.1
SODJ33A	SODJ33CA	33	36.7	40.6	1.0	1.0	53.3	3.8
SODJ36A	SODJ36CA	36	40.0	44.2	1.0	1.0	58.1	3.4
SODJ40A	SODJ40CA	40	44.4	49.1	1.0	1.0	64.5	3.1
SODJ43A	SODJ43CA	43	47.8	52.8	1.0	1.0	69.4	2.9
SODJ45A	SODJ45CA	45	50.0	55.3	1.0	1.0	72.7	2.8
SODJ48A	SODJ48CA	48	53.3	58.9	1.0	1.0	77.4	2.6
SODJ51A	SODJ51CA	51	56.7	62.7	1.0	1.0	82.4	2.4
SODJ54A	SODJ54CA	54	60.0	66.3	1.0	1.0	87.1	2.3
SODJ58A	SODJ58CA	58	64.4	71.2	1.0	1.0	93.6	2.1
SODJ60A	SODJ60CA	60	66.7	73.7	1.0	1.0	96.8	1.8
SODJ64A	SODJ64CA	64	71.1	78.6	1.0	1.0	103	1.7
SODJ70A	SODJ70CA	70	77.8	86.0	1.0	1.0	113	1.5
SODJ75A	SODJ75CA	75	83.3	92.1	1.0	1.0	121	1.4
SODJ78A	SODJ78CA	78	86.7	95.8	1.0	1.0	126	1.4
SODJ85A	SODJ85CA	85	94.4	104	1.0	1.0	137	1.3
SODJ90A	SODJ90CA	90	100	111	1.0	1.0	146	1.2
SODJ100A	SODJ100A	100	111	123	1.0	1.0	162	1.1
SODJ110A	SODJ110CA	110	122	135	1.0	1.0	177	1.0
SODJ120A	SODJ120CA	120	133	147	1.0	1.0	193	0.9
SODJ130A	SODJ130CA	130	144	159	1.0	1.0	209	0.8
SODJ150A	SODJ150CA	150	167	185	1.0	1.0	243	0.7
SODJ160A	SODJ160CA	160	178	197	1.0	1.0	259	0.7
SODJ170A	SODJ170CA	170	189	209	1.0	1.0	275	0.6

Fig.1 Peak Pulse Power Rating Curve

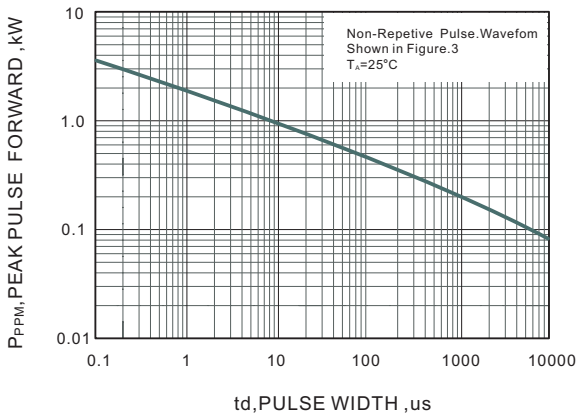


Fig.2 Forward Current Derating Curve

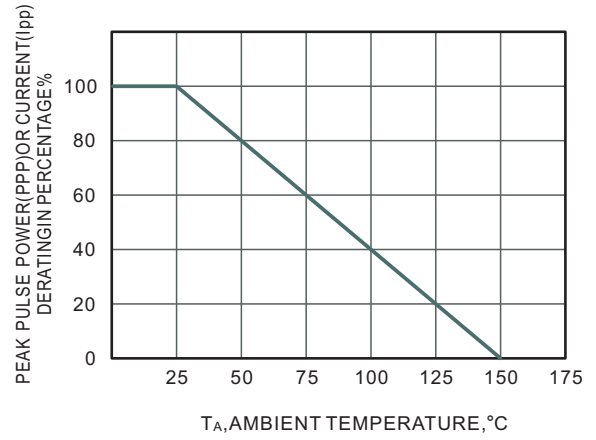


Fig.3 Pulse Waveform

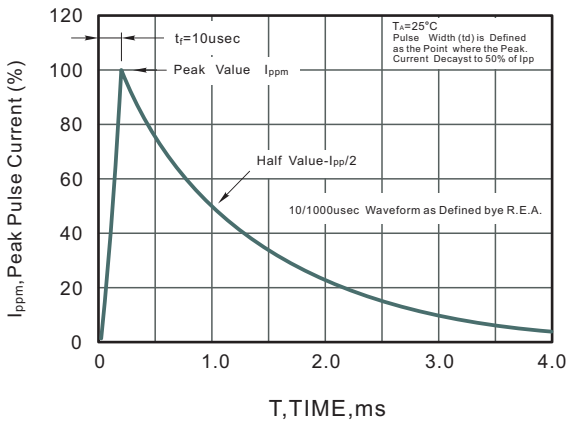


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current

