

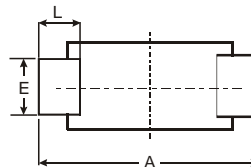
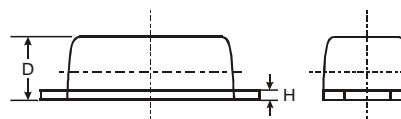
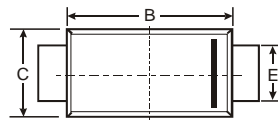
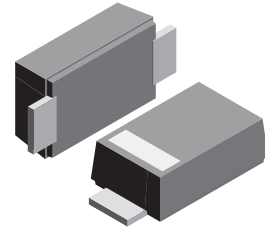
VOLTAGE RANGE: 5.0 - 170V
POWER: 200Watts

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	3.58	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			

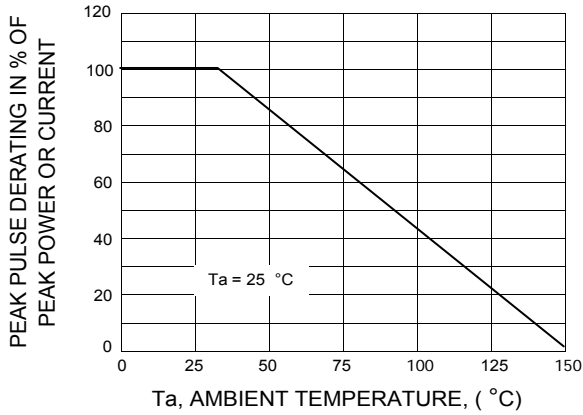
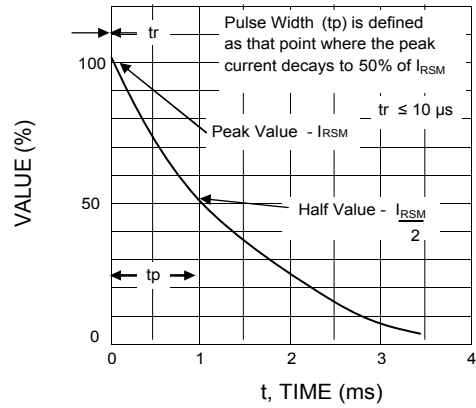
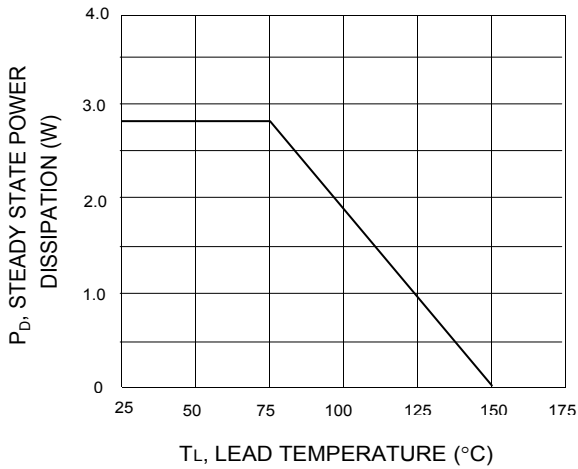
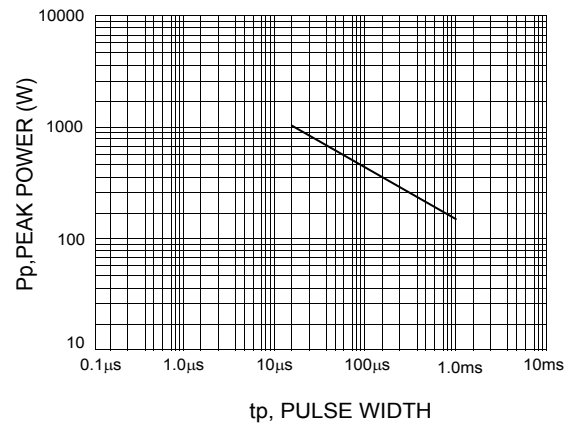
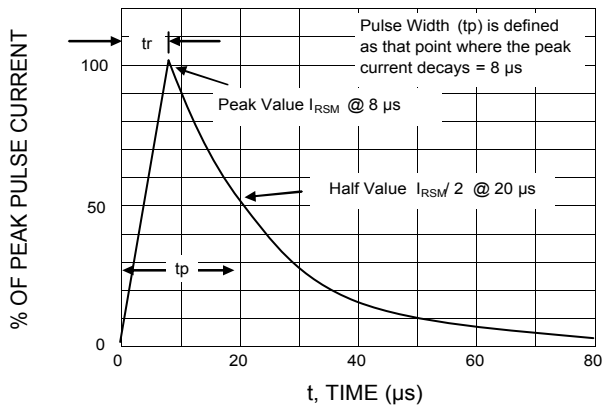
Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Maximum P_{PK} Dissipation (PW - 10/1000 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		Marking		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)	(Uni)	(Bi)	V _{RWM} (V)	V _{BR MIN} (V)	V _{BR MAX} (V)	I _T (mA)	I _R (μ A)	V _C (V)	I _{PP} (mA)
F2TVS5.0A	F2TVS5.0CA	KE	FE	5.0	6.40	7.00	10	400	9.2	21.7
F2TVS6.0A	F2TVS6.0CA	KG	FG	6.0	6.67	7.37	10	400	10.3	19.4
F2TVS6.5A	F2TVS6.5CA	KK	FK	6.5	7.22	7.98	10	250	11.2	17.9
F2TVS7.0A	F2TVS7.0CA	KM	FM	7.0	7.78	8.60	10	100	12.0	16.7
F2TVS7.5A	F2TVS7.5CA	KP	FP	7.5	8.33	9.21	1.0	50	12.9	15.5
F2TVS8.0A	F2TVS8.0CA	KR	FR	8.0	8.89	9.83	1.0	25	13.6	14.7
F2TVS8.5A	F2TVS8.5CA	KT	FT	8.5	9.44	10.4	1.0	10	14.4	13.9
F2TVS9.0A	F2TVS9.0CA	KV	FV	9.0	10.0	11.1	1.0	5.0	15.4	13.0
F2TVS10A	F2TVS10CA	KX	FX	10	11.1	12.3	1.0	2.5	17.0	11.8
F2TVS11A	F2TVS11CA	KZ	FZ	11	12.2	13.5	1.0	2.5	18.2	11.0
F2TVS12A	F2TVS12CA	LE	HE	12	13.3	14.7	1.0	2.5	19.9	10.1
F2TVS13A	F2TVS13CA	LG	HG	13	14.4	15.9	1.0	1.0	21.5	9.3
F2TVS14A	F2TVS14CA	LK	HK	14	15.6	17.2	1.0	1.0	23.2	8.6
F2TVS15A	F2TVS15CA	LM	HM	15	16.7	18.5	1.0	1.0	24.4	8.2
F2TVS16A	F2TVS16CA	LP	HP	16	17.8	19.7	1.0	1.0	26.0	7.7
F2TVS17A	F2TVS17CA	LR	HR	17	18.9	20.9	1.0	1.0	27.6	7.2
F2TVS18A	F2TVS18CA	LT	HT	18	20.0	22.1	1.0	1.0	29.2	6.8
F2TVS20A	F2TVS20CA	LV	HV	20	22.2	24.5	1.0	1.0	32.4	6.2
F2TVS22A	F2TVS22CA	LX	HX	22	24.4	26.9	1.0	1.0	35.5	5.6
F2TVS24A	F2TVS24CA	LZ	HZ	24	26.7	29.5	1.0	1.0	38.9	5.1
F2TVS26A	F2TVS26CA	ME	JE	26	28.9	31.9	1.0	1.0	42.1	4.8
F2TVS28A	F2TVS28CA	MG	JG	28	31.1	34.4	1.0	1.0	45.4	4.4
F2TVS30A	F2TVS30CA	MK	JK	30	33.3	36.8	1.0	1.0	48.4	4.1
F2TVS33A	F2TVS33CA	MM	JM	33	36.7	40.6	1.0	1.0	53.3	3.8
F2TVS36A	F2TVS36CA	MP	JP	36	40.0	44.2	1.0	1.0	58.1	3.4
F2TVS40A	F2TVS40CA	MR	JR	40	44.4	49.1	1.0	1.0	64.5	3.1
F2TVS43A	F2TVS43CA	MT	JT	43	47.8	52.8	1.0	1.0	69.4	2.9
F2TVS45A	F2TVS45CA	MV	JV	45	50.0	55.3	1.0	1.0	72.7	2.8
F2TVS48A	F2TVS48CA	MX	JX	48	53.3	58.9	1.0	1.0	77.4	2.6
F2TVS51A	F2TVS51CA	MZ	JZ	51	56.7	62.7	1.0	1.0	82.4	2.4
F2TVS54A	F2TVS54CA	NE	XE	54	60.0	66.3	1.0	1.0	87.1	2.3
F2TVS58A	F2TVS58CA	NG	XG	58	64.4	71.2	1.0	1.0	93.6	2.1
F2TVS60A	F2TVS60CA	NK	XK	60	66.7	73.7	1.0	1.0	96.8	1.8
F2TVS64A	F2TVS64CA	NM	XM	64	71.1	78.6	1.0	1.0	103	1.7
F2TVS70A	F2TVS70CA	NP	XP	70	77.8	86.0	1.0	1.0	113	1.5
F2TVS75A	F2TVS75CA	NR	XR	75	83.3	92.1	1.0	1.0	121	1.4
F2TVS78A	F2TVS78CA	NT	XT	78	86.7	95.8	1.0	1.0	126	1.4
F2TVS85A	F2TVS85CA	NV	XB	85	94.4	104	1.0	1.0	137	1.3
F2TVS90A	F2TVS90CA	NX	XX	90	100	111	1.0	1.0	146	1.2
F2TVS100A	F2TVS100CA	NZ	XZ	100	111	123	1.0	1.0	162	1.1
F2TVS110A	F2TVS110CA	PE	TE	110	122	135	1.0	1.0	177	1.0
F2TVS120A	F2TVS120CA	PG	TG	120	133	147	1.0	1.0	193	0.9
F2TVS130A	F2TVS130CA	PK	TK	130	144	159	1.0	1.0	209	0.8
F2TVS150A	F2TVS150CA	PM	TM	150	167	185	1.0	1.0	243	0.7
F2TVS160A	F2TVS160CA	PP	TP	160	178	197	1.0	1.0	259	0.7
F2TVS170A	F2TVS170CA	PR	TR	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
