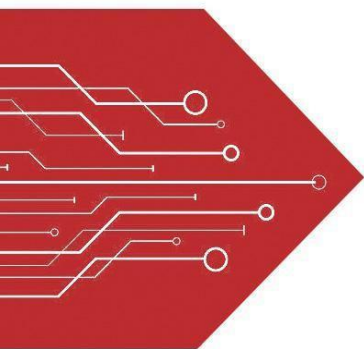


# MSKSEMI

SEMICONDUCTOR



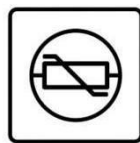
ESD



TVS



TSS



MOV



GDT



PLED

Product data sheet

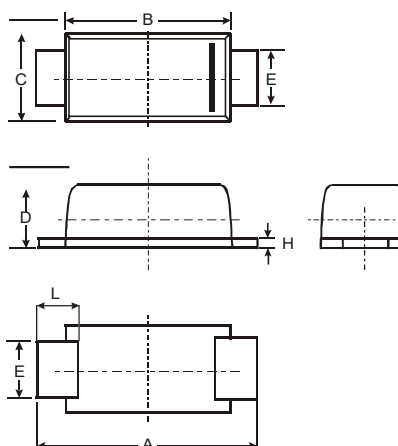
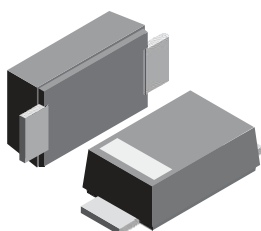
## POWER: 200W a t t s

### 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 form, repetition rate (duty cycle): 0.01%
- High temperature soldering guaranteed: 260 °C/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	1.00	1.30	1.15
E	0.80	1.10	0.95
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 $\mu\text{s}$ )	$P_{PK}$	200	W
Maximum $P_{PK}$ Dissipation @ $T_A = 25^{\circ}\text{C}$ (PW - 8/10 $\mu\text{s}$ ) (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	$^{\circ}\text{C/W}$
Thermal Resistance, Junction to Lead (Note 3)	$R_{\theta JL}$	26	$^{\circ}\text{C/W}$
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.

## Electrical Characteristics

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
SSCT12V12D1	$V_{RWM}$ (V)	$V_{BR MIN}(V)$	$V_{BR MAX}(V)$	$I_T$ (mA)	$I_R(\mu A)$	$V_C(V)$	$I_{PP}$ (A)
	12	13.3	14.7	1.0	2.5	19.9	10.1

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