

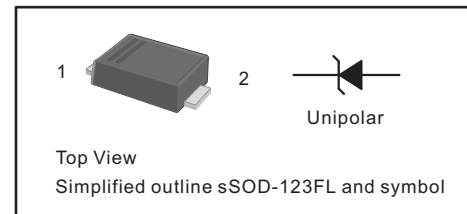
# SMF30A

## FEATURES

- For surface mounted applications in order to optimize board space.
- Low profile package
- Glass passivated junction
- Low inductance
- Plastic package has Underwriters Laboratory Flammability

## PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



## MECHANICAL DATA

- Case: SOD-123FL
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight:15mg 0.00048oz

## Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Peak Pulse Power Dissipation on TA=25°C (Note 1,2,5, Fig1)	$P_{PPM}$	200	W
Peak Forward Surge Current (Note 3)	$I_{FSM}$ (UNI)	20	A
Peak Pulse Current on 10/1000 us waveform (Note 1) Fig 2	$I_{PPM}$	see Table 1	A
Steady State Power Dissipation (Note 4)	$P_{M(AV)}$	1	W
Operating Junction and Storage Range	$T_J, T_{STG}$	-55 to +150	°C
Typical Thermal Resistance	$R_{\theta JA}$	180	°C

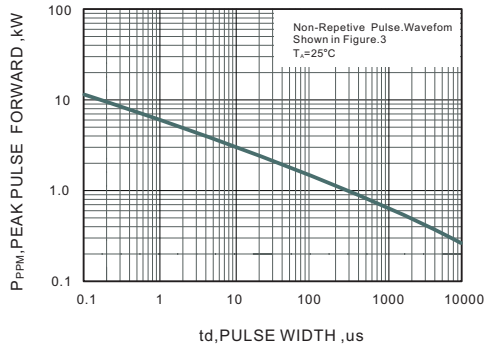
## NOTES

1. Non-repetitive current pulse per Fig 3 and derated above  $T_A=25^\circ\text{C}$  per Fig 2
2. Mounted on 5mm<sup>2</sup> copper pads to each terminal
3. 8.3ms single half sinewave, or equivalent square wave duty cycle=4 pulses per minutes maximum
4. lead temperature at  $T_L=75^\circ\text{C}$
5. Peak pulse powe. waveform is  $t_p=10/1000\text{us}$
6. A transient suppressor is selected according to the working peak reverse voltage( $V_{RWM}$ ), Which Should be equal to or greater than the DC or continuous peak operating voltage level

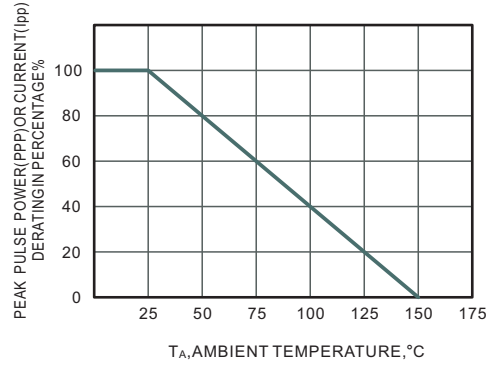
## Characteristics at Ta = 25°C

Type	Marking	$V_{RWM}$	Breakdown Voltage		Test Current	Reverse Leakage	Max. Clamp Voltage	Peak Pulse Current
			$V_{BR} @ I_T$					
			Min	Max	$I_T$	$I_R @ V_{RWM}$	$V_C @ I_{PP}$	$I_{PP}$
Uni	Uni	V	V	V	mA	$\mu\text{A}$	V	A
SMF30A	30A	30	33.3	36.8	1	1	48.4	4.1

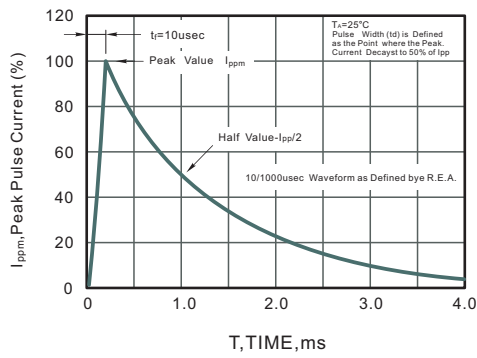
**Fig.1 Peak Pulse Power Rating Curve**



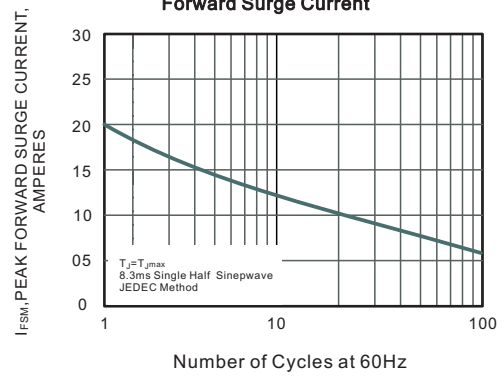
**Fig.2 Forward Current Derating Curve**



**Fig.3 Pulse Waveform**



**Fig.4 Maximum Non-Repetitive Peak Forward Surge Current**

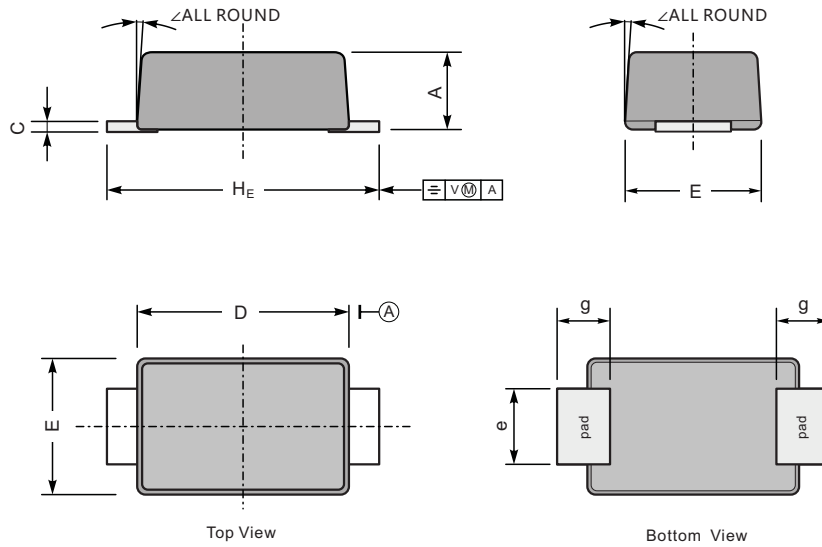


# SMF30A

## PACKAGE OUTLINE

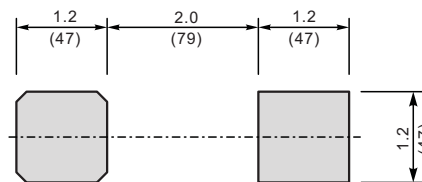
Plastic surface mounted package; 2 leads

SOD-123FL



UNIT		A	C	D	E	e	g	$H_E$	$\angle$
mm	max	1.1	0.20	2.9	1.9	1.1	0.9	3.8	7°
	min	0.9	0.12	2.6	1.7	0.8	0.7	3.5	
mil	max	43	7.9	114	75	43	35	150	
	min	35	4.7	102	67	31	28	138	

### The recommended mounting pad size



Unit:  $\frac{\text{mm}}{\text{(mil)}}$

单击下面可查看定价，库存，交付和生命周期等信息

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