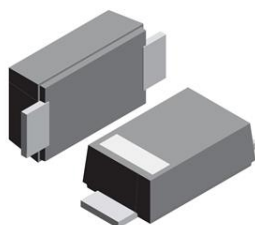


### Features

- 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 °C/10 seconds, at terminals

### Package and Pin Configuration



SOD123FL

### 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

### Circuit diagram



Marking: U03A

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

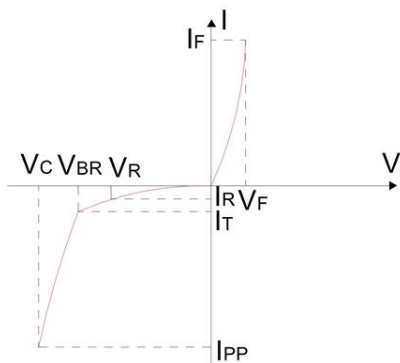
Parameter	Symbol	Value	Unit
Storage and operating junction temperature range	$T_{STG}/T_J$	-55 to +150	$^\circ\text{C}$
Peak pulse power dissipation on 10/1000 $\mu$ s waveform	$P_{PP}$	200	W
Typical thermal resistance junction to lead	$R_{\theta JL}$	100	$^\circ\text{C}/\text{W}$
Typical thermal resistance junction to ambient	$R_{\theta JA}$	220	$^\circ\text{C}/\text{W}$

### ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$ )

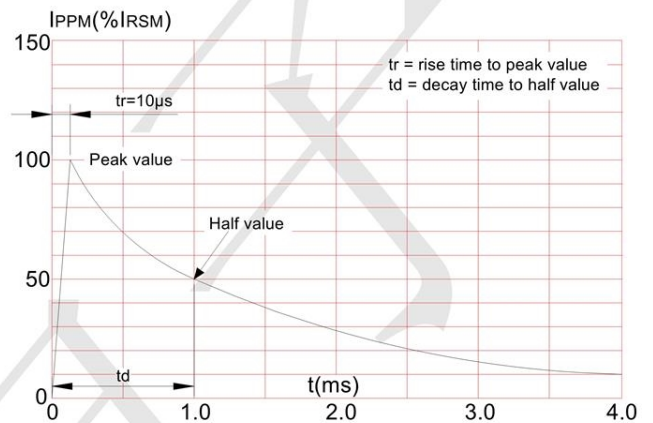
Part Number	$V_R$	$I_R@V_R$	$V_{BR}@I_T$	$I_T$	$V_C@I_{PP}$	$I_{PP}^{(1)}$	$C_o^{(2)}$	Marking
	V	$\mu\text{A}$	V (min)	mA	V (max)	A (max)	pF (typ.)	
SMF3.3A	3.3	50	4.1	1	7.3	27	1900	U03A

**RATINGS AND V-I CHARACTERISTICS CURVES** ( $T_A=25^\circ\text{C}$ , unless otherwise noted)

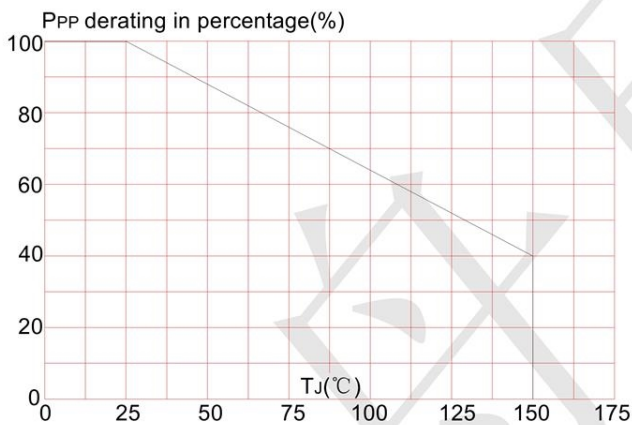
**FIG.1: V- I curve characteristics (Uni-directional)**



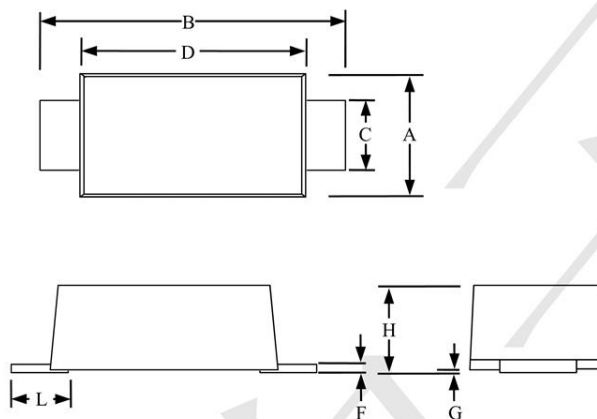
**FIG.2: Pulse waveform**



**FIG.3: Pulse derating curve**



**Package Outline Dimensions: SOD-123FL**



SOD-123FL						
Dimension	Inches			Millimeters		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.059		0.079	1.5		2
B	0.134		0.154	3.4		3.9
C	0.028		0.047	0.7		1.2
D	0.098		0.114	2.5		2.9
F	0.002		0.01	0.05		0.26
G	-		0.004	-		0.1
H	0.037		0.053	0.95		1.35
L	0.014		0.035	0.35		0.9