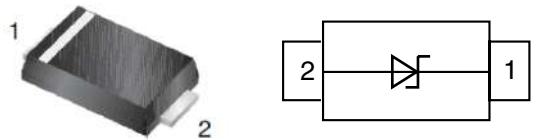


## Features

- 5900Watts peak pulse power (8/20μs)
- SOD-123FL package
- Unidirectional configurations
- Low clamping voltage
- Low leakage current
- Medium capacitance ( $C_J=590\text{pF}$  typ.)
- Protection one data/power line to:  
IEC 61000-4-2 ±30kV contact ±30kV air  
IEC 61000-4-4 (EFT) 80A (5/50ns)  
IEC 61000-4-5 (Lightning) 170A (8/20μs)



## Mechanical Data

- **Case:** SOD-123FL (plastic package)  
Lead free; RoHS compliant; Halogen free
- **Molding Compound Flammability Rating:**  
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:  
260 °C/10 sec. at terminals

## Applications

- Computers and peripherals
- Communication systems
- Cellular handsets and accessories
- Portable electronics

## Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μS)	P <sub>PP</sub>	5900	W
ESD contact/air discharge (IEC-61000-4-2)	V <sub>ESD</sub>	30/30	kV
Peak Pulse Current (8/20μS )	I <sub>PP</sub>	170	A
Junction Temperature	T <sub>J</sub>	-55 to +150	°C
Storage temperature	T <sub>STG</sub>	-55 to +150	°C

## Electrical Characteristics

(T<sub>A</sub> = 25 °C unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V <sub>RWM</sub>			24		V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>T</sub> =1mA	26.5			V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =24V			1	uA
Clamping Voltage	V <sub>C</sub>	I <sub>PP</sub> =170A			35	V
Junction Capacitance	C <sub>J</sub>	V <sub>R</sub> =0V, f=1MHz		590		pF

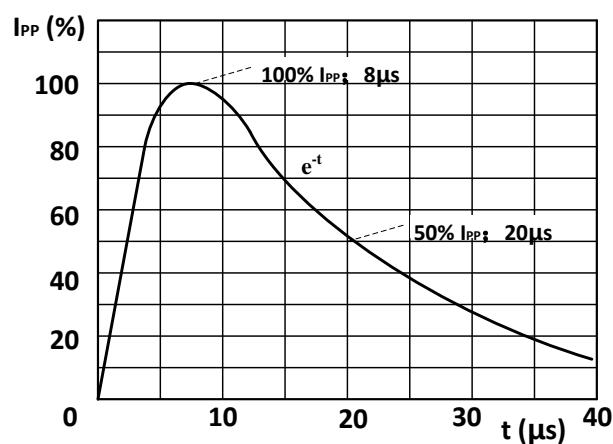
**Typical Characteristics** ( $T_{amb} = 25^{\circ}\text{C}$  unless otherwise specified)


Fig. 1. 8/20  $\mu\text{s}$  pulse waveform according to  
IEC 61000-4-5 and IEC 61643-321

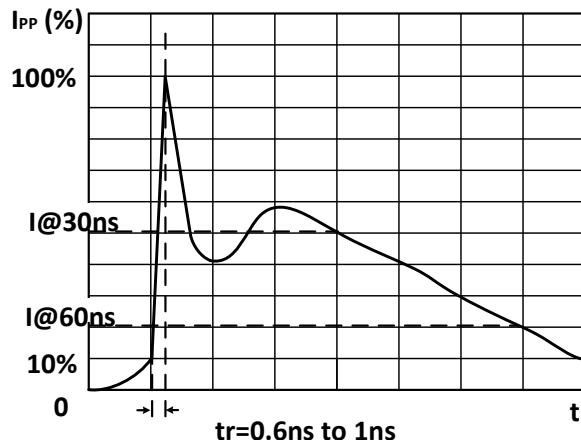
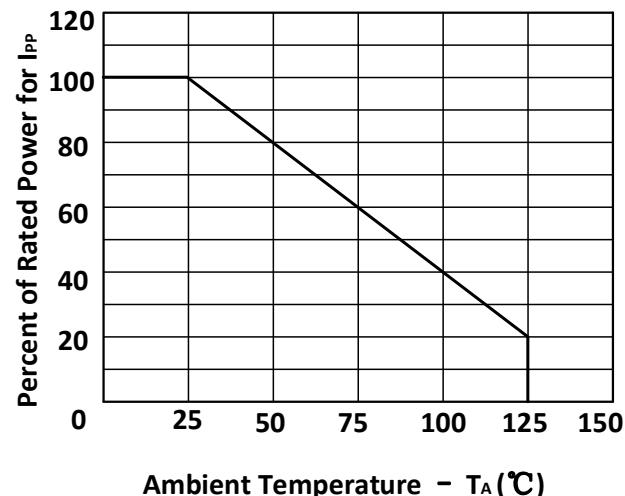
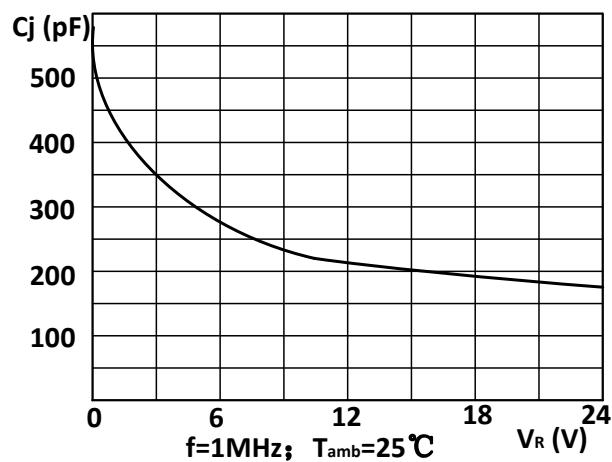


Fig. 2. ESD pulse waveform according to  
IEC 61000-4-2



Ambient Temperature -  $T_A$  ( $^{\circ}\text{C}$ )

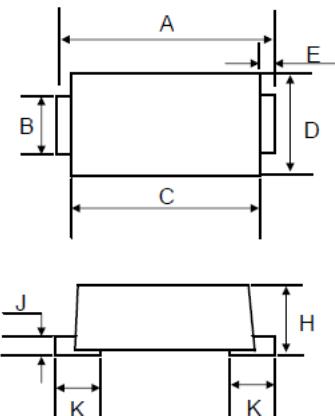
Fig. 3. Power Derating Curve



$f=1\text{MHz}; T_{amb}=25^{\circ}\text{C}$

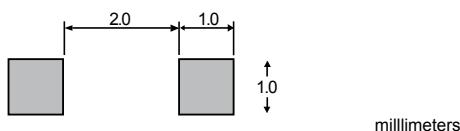
Fig. 4. Junction Capacitance vs VR

### Package Dimensions

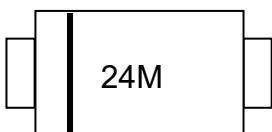


DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	3.5	3.9	0.138	0.159
B	0.9	1.1	0.035	0.043
C	2.6	3.0	0.103	0.119
D	1.6	2.0	0.063	0.079
E	0.45Typ		0.018Typ	
H	0.9	1.4	0.036	0.055
J	0.12	0.22	0.005	0.009
K	0.8Typ		0.032Typ	

### Pad Dimensions



### Marking



### Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
YEDSF1224170V	SOD-123FL	Tape and reel	3000pcs / reel	EIA STD RS-481