

# ESD Suppressor 15V Unidirectional SOD-123F

ME151U85S123F

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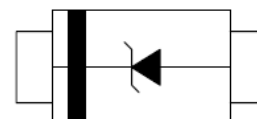
## FEATURE

- IEC 61000-4-2 ESD:  $\pm 15\text{KV}$  (Air)  $\pm 8\text{KV}$  (Contact)
- ESD Protection for one Unidirectional Channel
- High Surge Capability
- Fast Response Time
- Low Leakage Current
- Solid-State Silicon-Avalanche Technology



## APPLICATION

- Power Management Systems
- Personal Digital Assistants (PDA)
- Cellular Handsets & Accessories
- Portable Devices
- Notebooks, Desktops and Servers



## MAXIMUM RATINGS AND CHARACTERISTICS

Parameter	Symbol	Value	Unit
ESD Voltage (Contact discharge)	$V_{\text{ESD}}$	$\pm 8$	KV
ESD Voltage (Air discharge)		$\pm 15$	
Peak Pulse Power ( $t_p=10/1000\mu\text{s}$ )	$P_{\text{PP}}$	250	W
Operating & Storage Temperature Range	$T_J, T_{\text{STG}}$	-55~+150	$^{\circ}\text{C}$

## ELECTRICAL CHARACTERISTICS

Parameter	Condition	Symbol	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	--	$V_{\text{RWM}}$	--	--	15	V
Reverse Breakdown Voltage	$I_{\text{BR}}=1\text{mA}$	$V_{\text{BR}}$	16.7	--	--	V
Reverse Leakage Current	$V_{\text{R}}=15\text{V}$	$I_{\text{R}}$	--	--	1	$\mu\text{A}$
Clamping Voltage	$I_{\text{PP}}=3\text{A}, t_p=10/1000\mu\text{s}$	$V_{\text{C}}$	--	--	85	V
Off State Junction Capacitance	$V_{\text{dc}}=0, f=1\text{MHz}$	$C_{\text{J}}$	--	75	85	pF

Notes:

1.  $T_J=25^{\circ}\text{C}$  unless otherwise specified

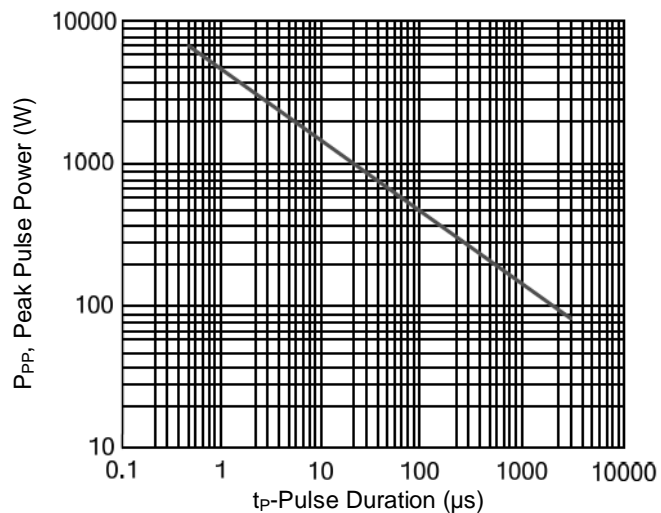
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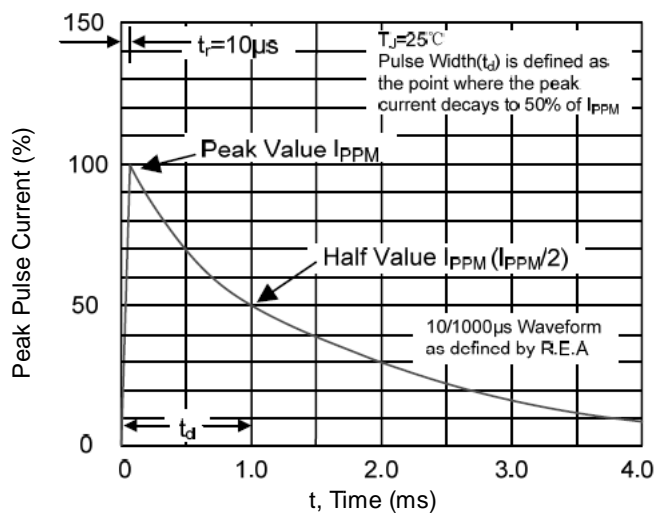
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## CHARACTERISTIC CURVES

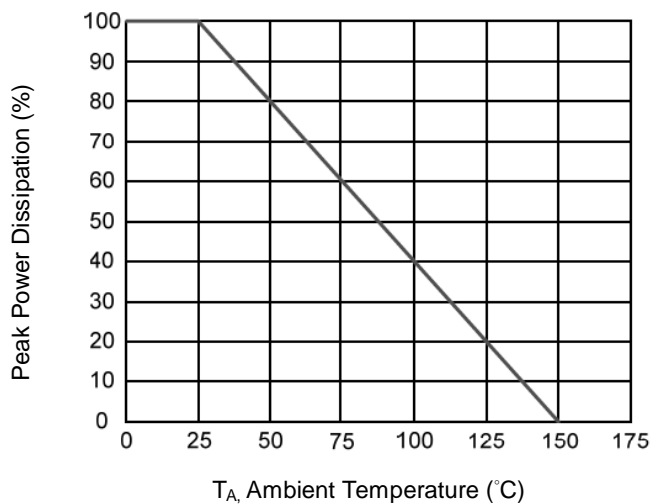
Peak Pulse Power Rating Curve



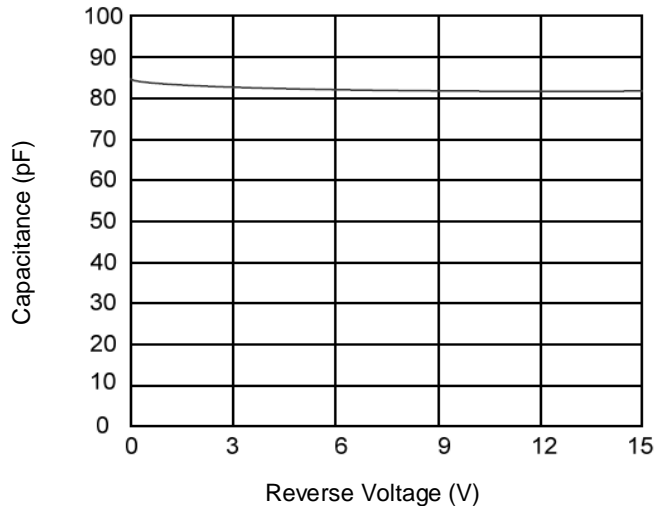
10/1000 $\mu s$  Pulse Waveforms



Power Derating Curve



Capacitance vs. Reverse Voltage



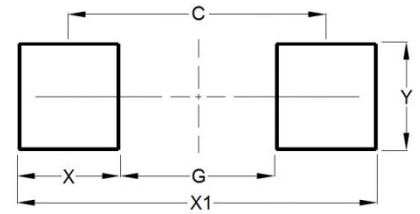
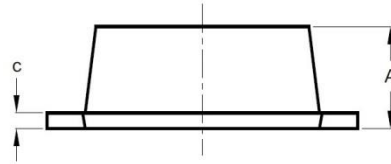
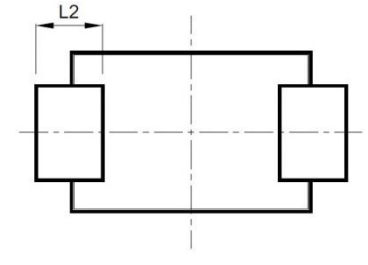
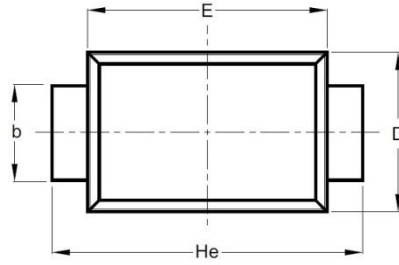
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## DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A	0.90	1.40
b	0.75	1.10
C	0.12	0.22
D	1.60	2.00
E	2.60	3.00
He	3.50	3.90
L2	0.80	0.80
C	2.80	2.80
G	1.50	1.50
X	1.30	1.30
X1	4.20	4.20
Y	1.80	1.80



\*Specifications subject to change without notice.