

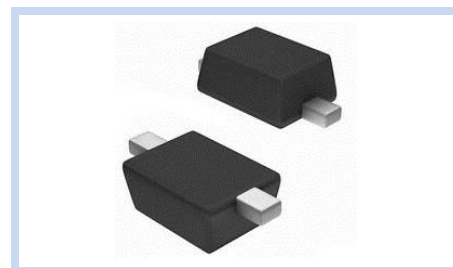
# ESD Suppressor AEC-Q101 15V Unidirectional SOD-323F

ME151US323FA120

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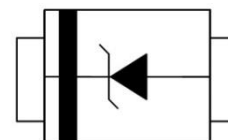
## FEATURE

- IEC 61000-4-2 ESD:  $\pm 15\text{KV}$  (Air)  $\pm 8\text{KV}$  (Contact)
- ESD Protection for One Unidirectional Channel
- Low Leakage Current
- Low Clamping Voltage
- AEC-Q101 Qualified



## APPLICATION

- Cellular Handsets & Accessories
- Personal Digital Assistants (PDAs)
- Notebooks & Handhelds
- Peripherals
- Portable Devices



## MAXIMUM RATINGS AND CHARACTERISTICS

Parameter	Symbol	Value	Unit
ESD Voltage (Contact discharge)	$V_{ESD}$	$\pm 8$	KV
ESD Voltage (Air discharge)		$\pm 15$	
Peak Pulse Power ( $t_p=8/20\mu s$ )	$P_{PP}$	350	W
Operating & Storage Temperature Range	$T_J, T_{STG}$	-50~+150	$^{\circ}\text{C}$

## ELECTRICAL CHARACTERISTICS

Parameter	Condition	Symbol	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	--	$V_{RWM}$	--	--	15	V
Reverse Breakdown Voltage	$I_{BR}=1\text{mA}$	$V_{BR}$	16.7	--	20	V
Reverse Leakage Current	$V_R=15\text{V}$	$I_R$	--	--	1	$\mu\text{A}$
Clamping Voltage	$I_{PP}=1\text{A}, t_p=8/20\mu s$	$V_C$	--	--	24	V
Off State Junction Capacitance	$V_{dc}=0, \text{Bias}, f=1\text{MHz}$	$C_J$	--	120	--	pF
	$V_{dc}=5, \text{Bias}, f=1\text{MHz}$		--	30	--	

Notes:  $T_J=25^{\circ}\text{C}$  unless otherwise specified

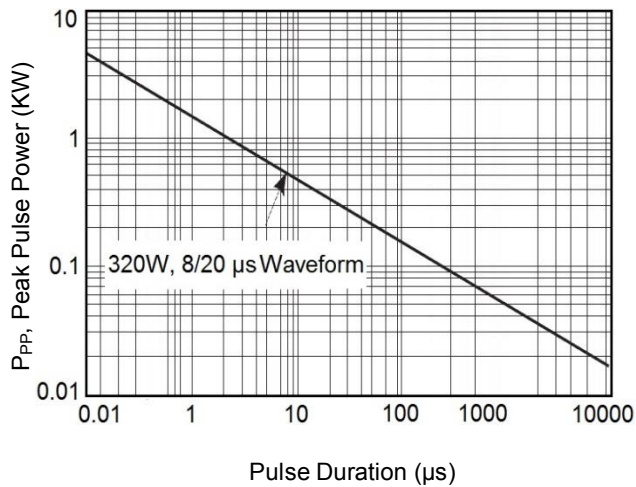
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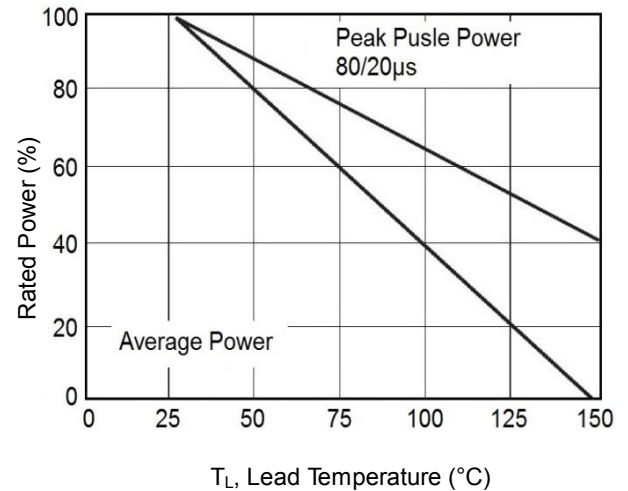
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## CHARACTERISTIC CURVES

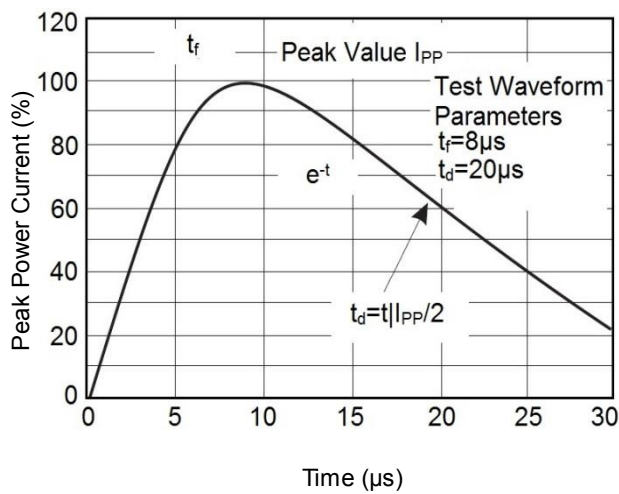
Peak Pulse Power vs. Pulse Time



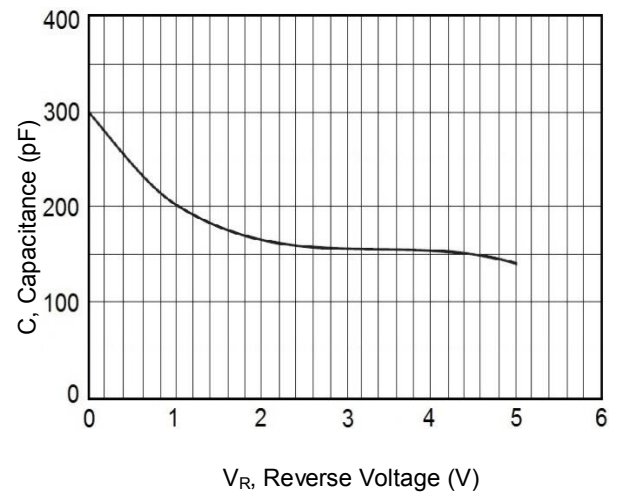
Derating Curve



Pulse Waveforms



Typical Reverse Voltage vs. Capacitance



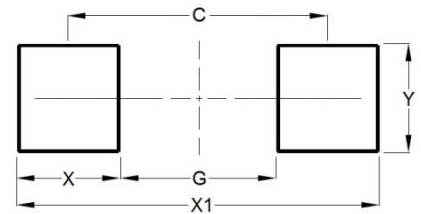
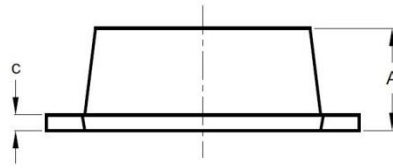
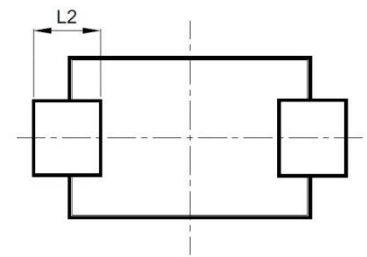
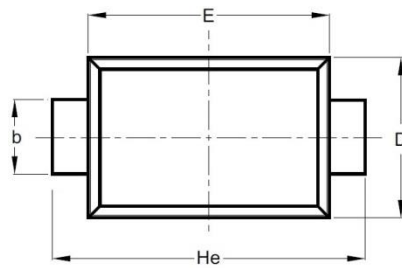
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## DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A	0.70	0.90
b	0.25	0.35
C	0.05	0.15
D	1.15	1.35
E	1.75	1.95
He	2.30	2.70
L2	0.30	-
C	2.00	2.00
G	1.30	1.30
X	0.70	0.70
X1	2.70	2.70
Y	0.40	0.40



\*Specifications subject to change without notice.