

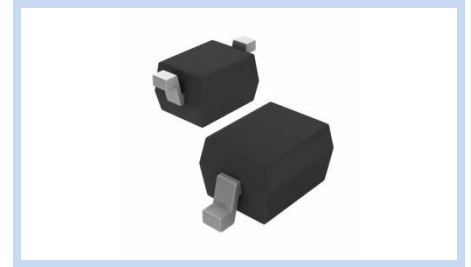
ESD Suppressor AEC-Q101 12V Unidirectional SOD-323G

ME121U19S323GA

MERITEK

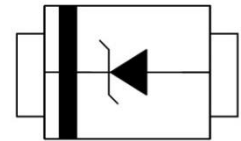
FEATURE

- IEC 61000-4-2 ESD: $\pm 30\text{KV}$ (Air) $\pm 30\text{KV}$ (Contact)
- ESD Protection for One Unidirectional Channel
- Low Leakage Current
- Low Clamping Voltage
- Solid-State Silicon-Avalanche Technology
- 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}	± 30	KV
ESD Voltage (Air discharge)		± 30	
Peak Pulse Power ($t_p=8/20\mu\text{s}$ Waveform)	P_{PP}	320	W
Operating and Storage Temperature Range	T_J, T_{STG}	-55~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS

Parameter	Condition	Symbol	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	--	V_{RWM}	--	--	12	V
Reverse Breakdown Voltage	$I_{BR}=1\text{mA}$	V_{BR}	13.3	--	--	V
Reverse Leakage Current	$V_R=12\text{V}$	I_R	--	--	1	μA
Clamping Voltage	$I_{PP}=1\text{A}, t_p=8/20\mu\text{s}$	V_C	--	--	19	V
Off State Junction Capacitance	$V_{dc}=0, f=1\text{MHz}$	C_J	--	--	150	pF

Notes:

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

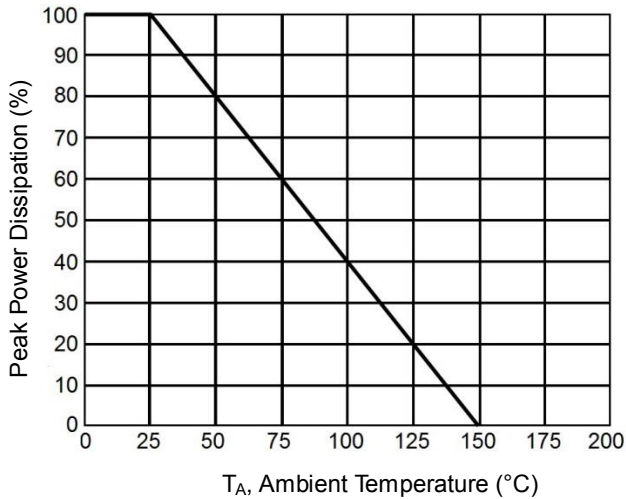
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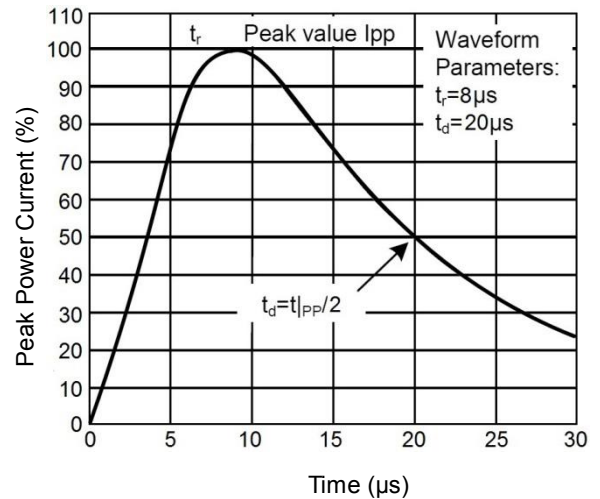
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CHARACTERISTIC CURVES

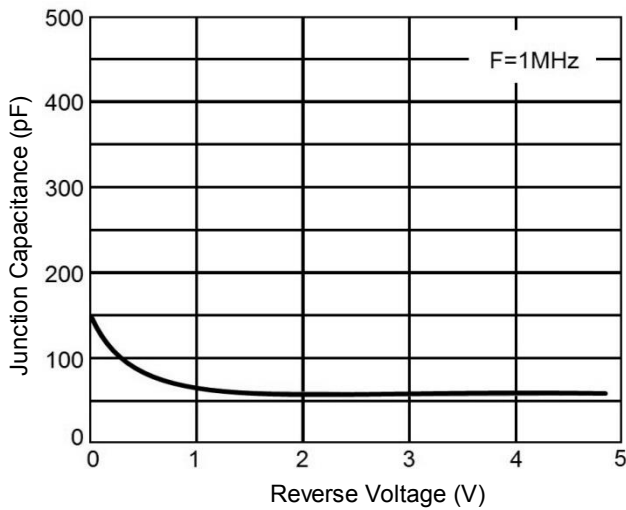
Derating Curve



Pulse Waveforms

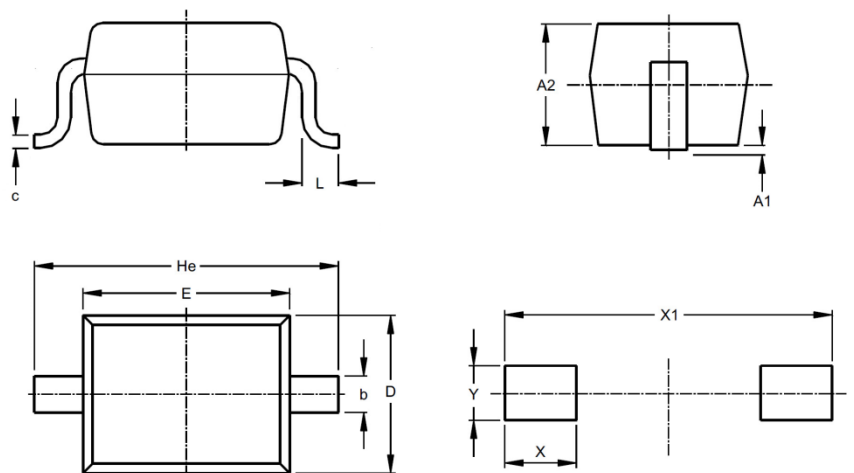


Capacitance vs. Reverse Voltage



DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A	0.80	1.10
A1	-	0.10
b	-	0.35
C	0.11	0.20
D	1.15	1.35
E	1.60	1.80
He	2.40	2.60
L	0.20	-
X	0.50	0.50
X1	2.80	2.80
Y	0.60	0.60



*Specifications subject to change without notice.