

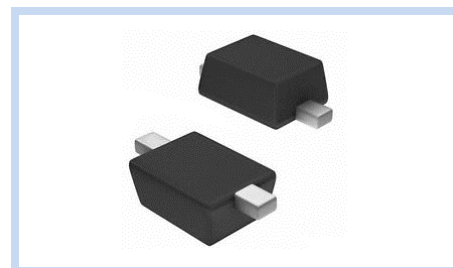
# ESD Suppressor AEC-Q101 8V Unidirectional SOD-523

ME81U13S523A

MERITEK

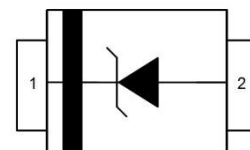
## FEATURE

- IEC 61000-4-2 ESD:  $\pm 25\text{KV}$  (Air)  $\pm 25\text{KV}$  (Contact)
- ESD Protection for one Unidirectional Channel
- Low Clamping Voltage
- Low Leakage Current
- AEC-Q101 Qualified



## APPLICATION

- Cellular Handsets & Accessories
- Personal Digital Assistants (PDAs)
- Notebooks & Handhelds
- Cordless Phones
- Peripherals
- MP3 players



## MAXIMUM RATINGS AND CHARACTERISTICS

Parameter	Symbol	Value	Unit
ESD Voltage (Contact discharge)	$V_{ESD}$	$\pm 25$	KV
ESD Voltage (Air discharge)		$\pm 25$	
Peak Pulse Current ( $t_p=8/20\mu\text{s}$ )	$I_{PP}$	5	A
Peak Pulse Power ( $t_p=8/20\mu\text{s}$ )	$P_{PP}$	120	W
Operating & Storage Temperature Range	$T_J, T_{STG}$	$-55 \sim +150$	$^{\circ}\text{C}$

## ELECTRICAL CHARACTERISTICS

Parameter	Condition	Symbol	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	--	$V_{RWM}$	--	--	8	V
Reverse Breakdown Voltage	$I_{BR}=1\text{mA}$	$V_{BR}$	8.5	--	--	V
Reverse Leakage Current	$V_R=8\text{V}$	$I_R$	--	--	5	$\mu\text{A}$
Clamping Voltage	$I_{PP}=5\text{A}, t_p=8/20\mu\text{s}$	$V_C$	--	--	13	V
Off State Junction Capacitance	$V_{dc}=0, \text{Bias}, f=1\text{MHz}$	$C_J$	--	--	70	pF

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

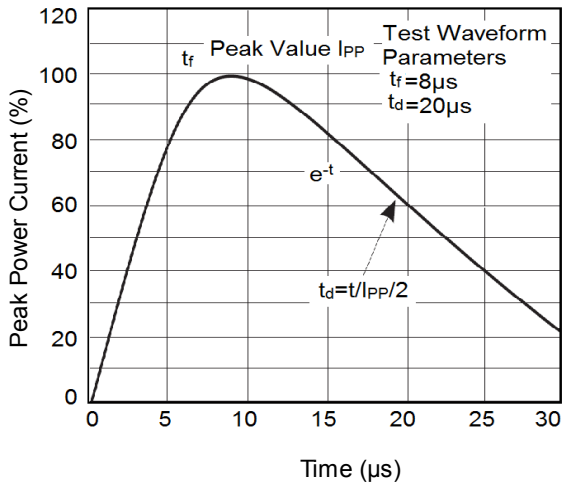
# ESD Suppressor AEC-Q101 8V Unidirectional SOD-523

ME81U13S523A

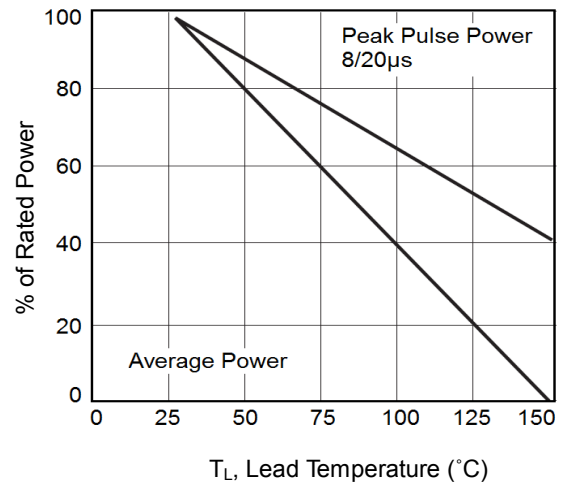
MERITEK

## CHARACTERISTIC CURVES

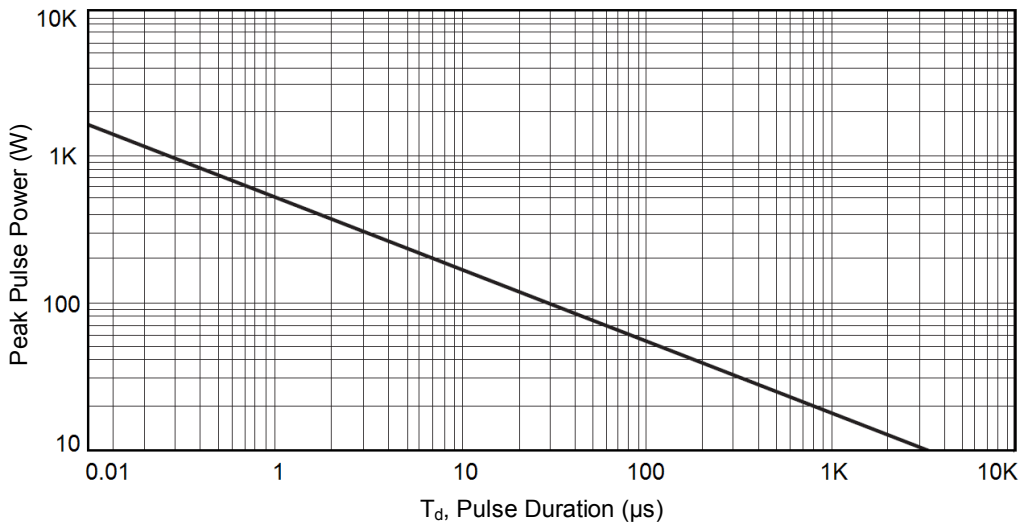
Pulse Waveforms



Power Derating Curve



Peak Pulse Power vs Pulse Time



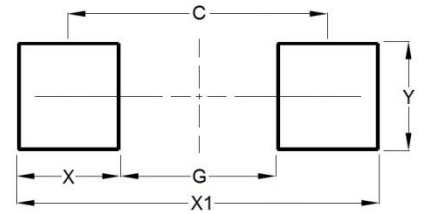
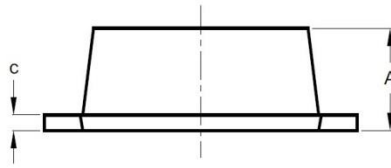
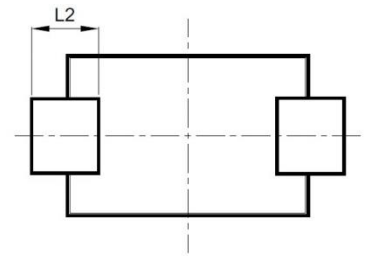
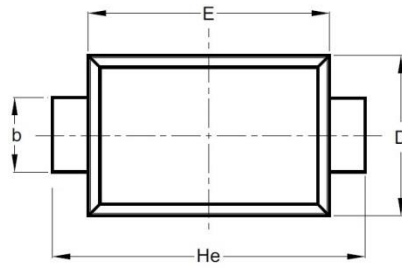
# ESD Suppressor AEC-Q101 8V Unidirectional SOD-523

ME81U13S523A

MERITEK

## DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A	0.55	0.65
b	0.25	0.35
C	0.05	0.15
D	0.75	0.85
E	1.15	1.25
He	1.50	1.70
L2	0.20	0.20
C	1.40	1.40
G	0.80	0.80
X	0.60	0.60
X1	2.00	2.00
Y	0.70	0.70



\*Specifications subject to change without notice.