

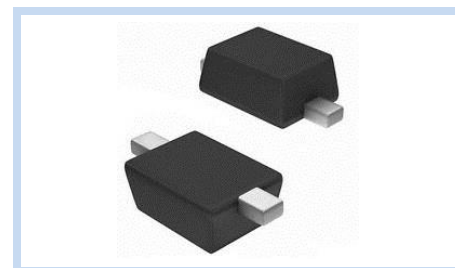
ESD Suppressor AEC-Q101 5V Unidirectional SOD-323

ME51US323FA300

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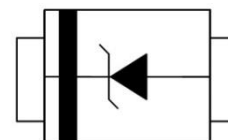
FEATURE

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

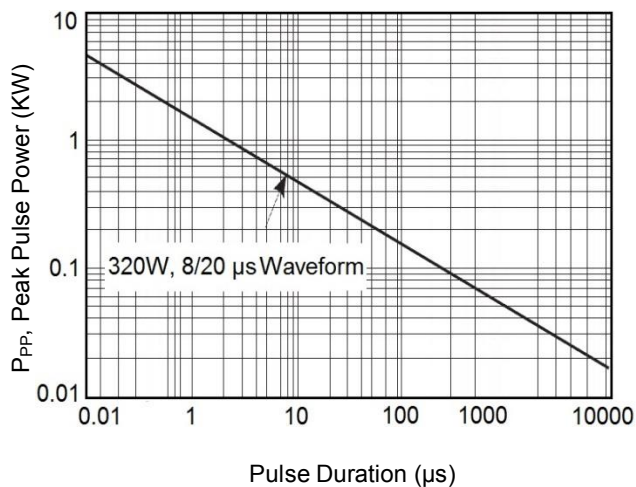
ELECTRICAL CHARACTERISTICS

Parameter	Condition	Symbol	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	--	V_{RWM}	--	--	5	V
Reverse Breakdown Voltage	$I_{BR}=1\text{mA}$	V_{BR}	6	--	7.2	V
Reverse Leakage Current	$V_R=5\text{V}$	I_R	--	--	10	μA
Clamping Voltage	$I_{PP}=1\text{A}, t_p=8/20\mu s$	V_C	--	--	9.8	V
Off State Junction Capacitance	$V_{dc}=0$ Bias, $f=1\text{MHz}$	C_J	--	300	--	pF
	$V_{dc}=5$ Bias, $f=1\text{MHz}$		--	100	--	

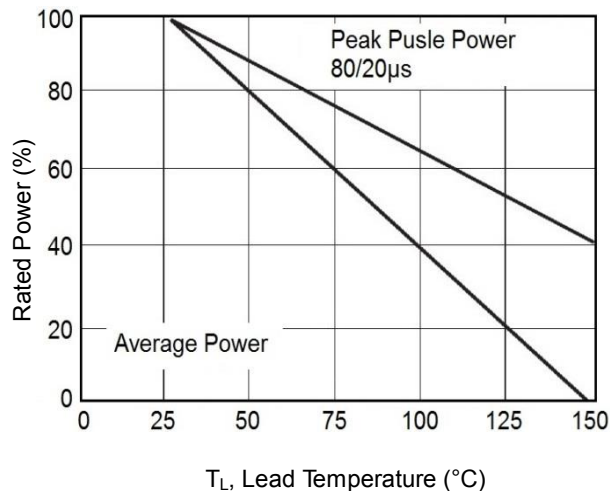
Notes: $T_J=25^{\circ}\text{C}$ unless otherwise specified

CHARACTERISTIC CURVES

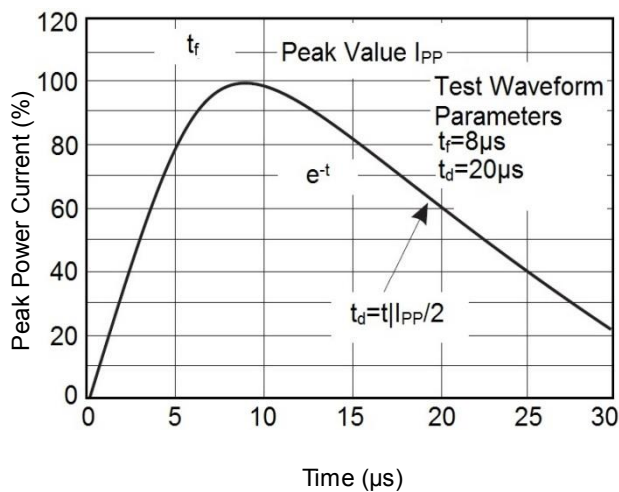
Peak Pulse Power vs. Pulse Time



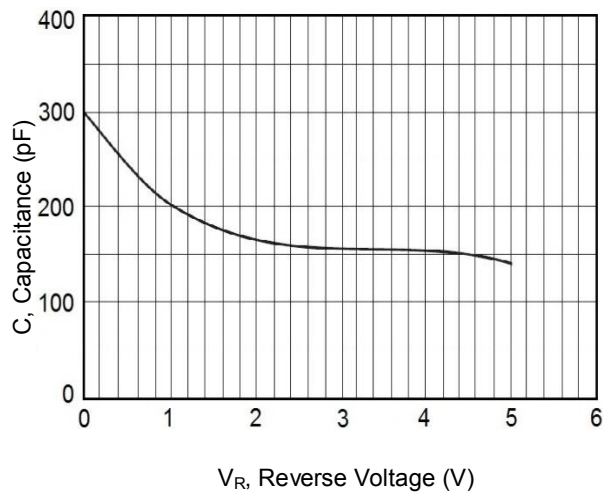
Derating Curve



Pulse Waveforms



Typical Reverse Voltage vs. Capacitance



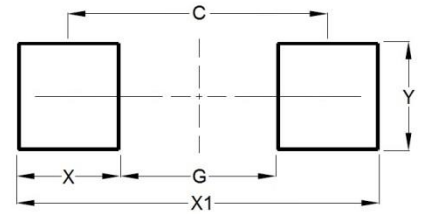
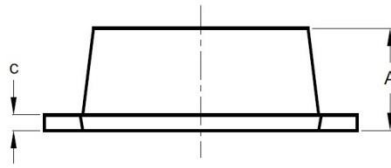
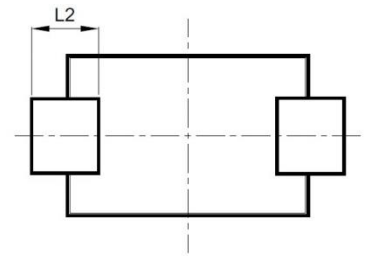
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DIMENSIONS AND RECOMMENDED LAND PATTERN

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.