

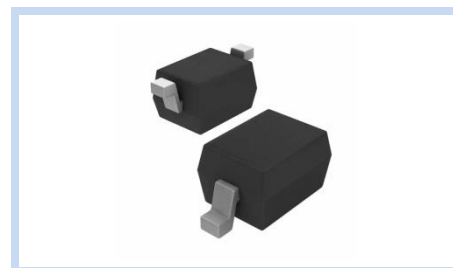
# ESD Suppressor 5V Bidirectional SOD-323G

ME51BS323G1P5

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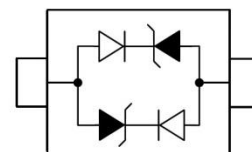
## FEATURE

- IEC 61000-4-2 ESD:  $\pm 15\text{KV}$  (Air)  $\pm 8\text{KV}$  (Contact)
- IEC 61000-4-4 EFT: 40A (5/50ns)
- ESD Protection for one Bidirectional Channel
- Low Leakage Current
- Low Clamping Voltage



## APPLICATION

- Networking and Telecom(Ethernet 10/100/1000 Base T)
- USB Interface
- Automotive Electronics
- Personal Digital Assistant (PDA)



## 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
Peak Pulse Current ( $t_p=8/20\mu s$ )	$I_{PP}$	17	A
Operating Temperature Range	$T_J$	-55~+125	$^{\circ}\text{C}$
Storage Temperature Range	$T_{STG}$	-55~+150	$^{\circ}\text{C}$

## ELECTRICAL CHARACTERISTICS

Parameter	Condition	Symbol	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	--	$V_{RWM}$	--	5	--	V
Reverse Breakdown Voltage	$I_{BR}=1\text{mA}$	$V_{BR}$	6.0	--	--	V
Reverse Leakage Current	$V_R=5\text{V}$	$I_R$	--	--	1	$\mu\text{A}$
Clamping Voltage	$I_{PP}=1\text{A}$ , $t_p=8/20\mu s$	$V_C$	--	--	9.8	V
Off State Junction Capacitance	$V_{dc}=0$ , $f=1\text{MHz}$	$C_J$	--	0.8	1.5	pF

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

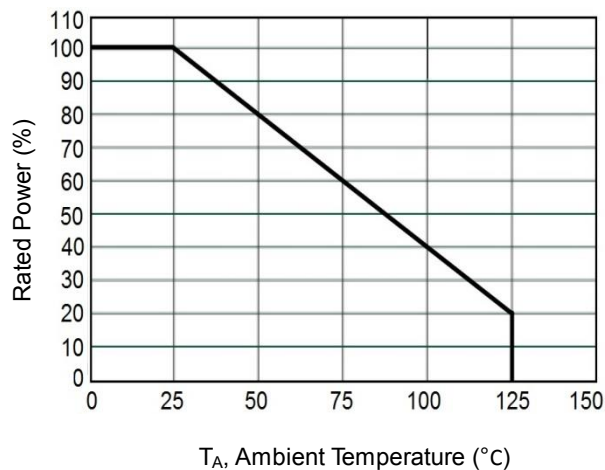
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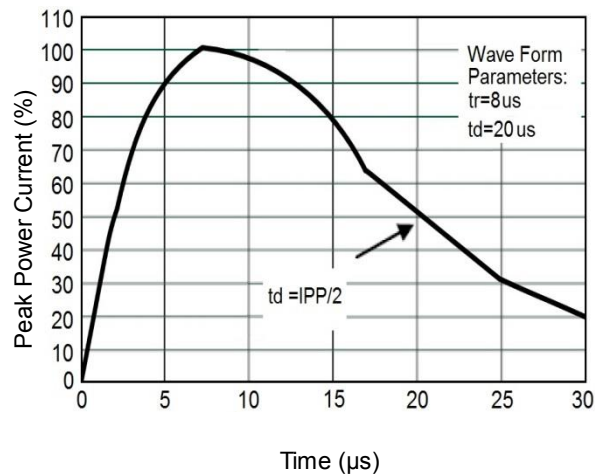
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## CHARACTERISTIC CURVES

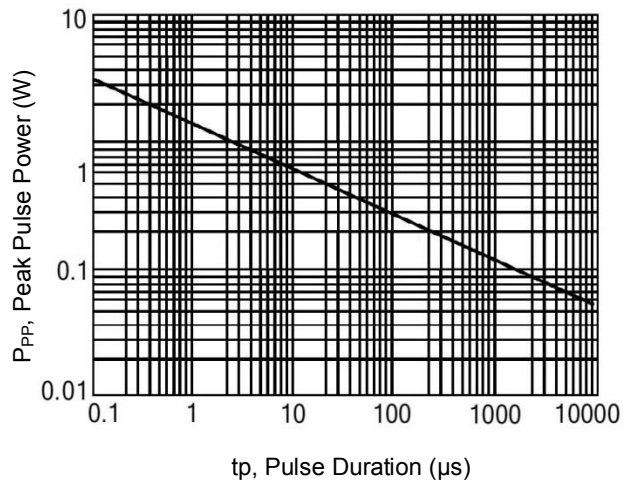
Derating Curve



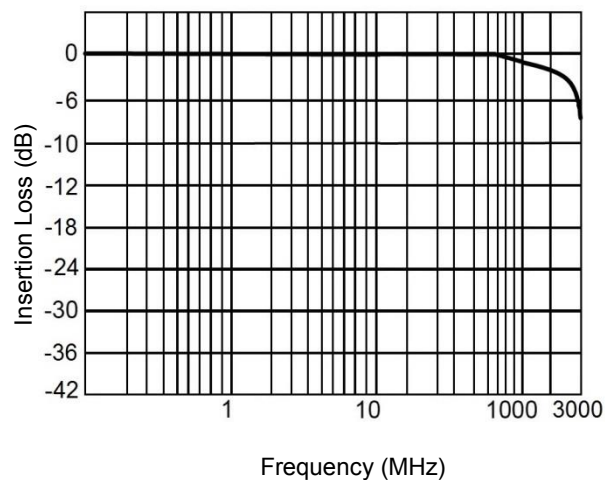
Pulse Waveforms



Non-Repetitive Peak Pulse vs. Pulse Time

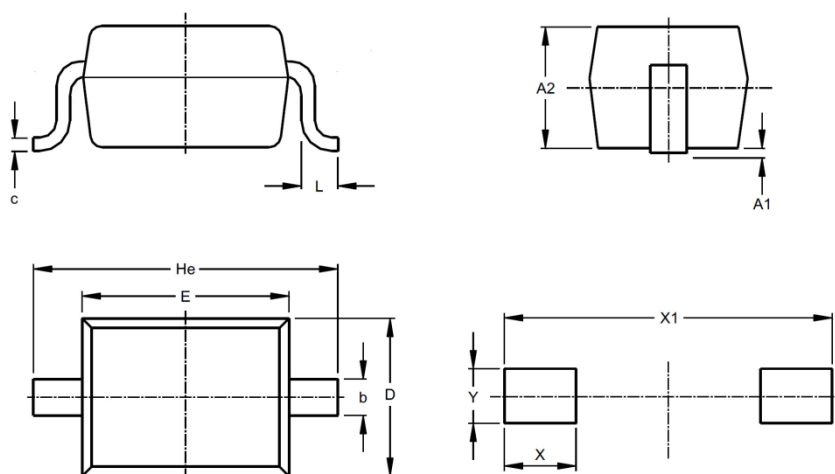


Insertion Loss S21



## DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A	0.80	1.10
A1	-	0.10
b	0.25	0.40
C	0.10	0.20
D	1.15	1.45
E	1.50	1.90
He	2.30	2.70
L	0.25	0.40
X	0.50	0.50
X1	2.80	2.80
Y	0.60	0.60



\*Specifications subject to change without notice.