

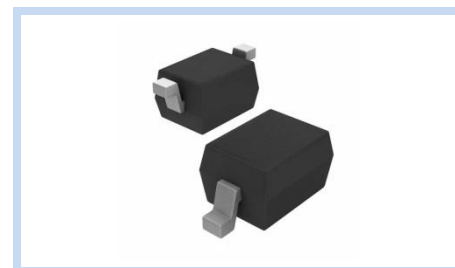
ESD Suppressor 12V Bidirectional SOD-323G

ME121B17V8S323G

MERITEK

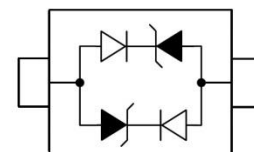
FEATURE

- 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}	± 8	KV
ESD Voltage (Air discharge)		± 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}	11	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}	--	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	$I_{PP}=1\text{A}$, $t_p=8/20\mu s$	V_C	--	--	17.8	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

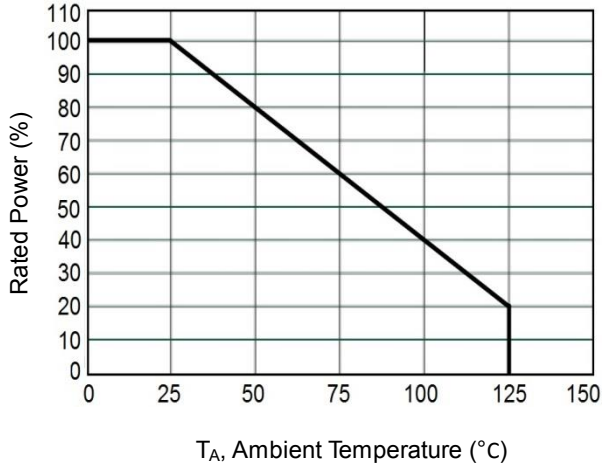
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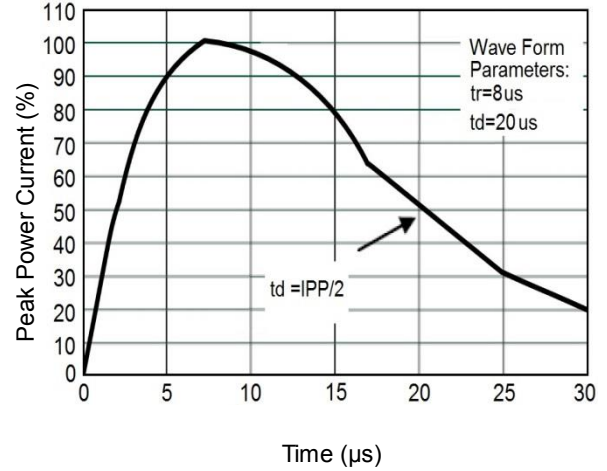
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CHARACTERISTIC CURVES

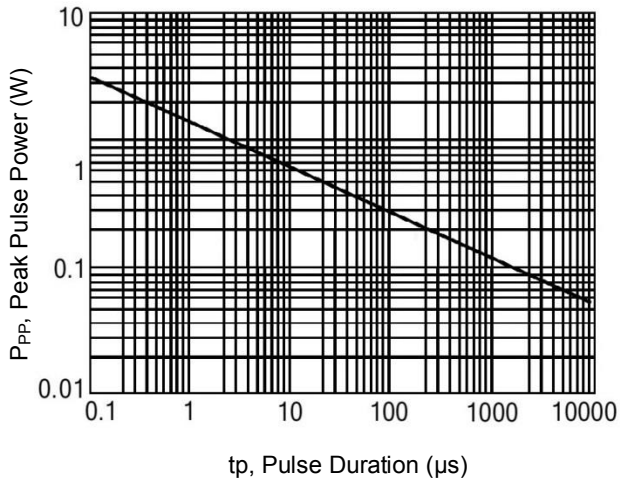
Derating Curve



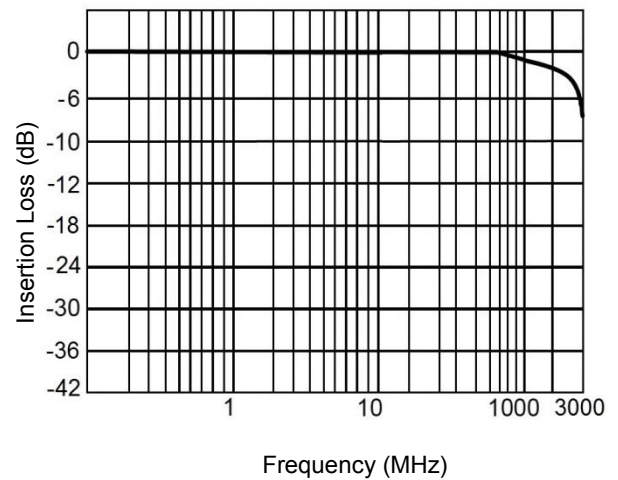
Pulse Waveforms



Non-Repetitive Peak Pulse vs. Pulse Time

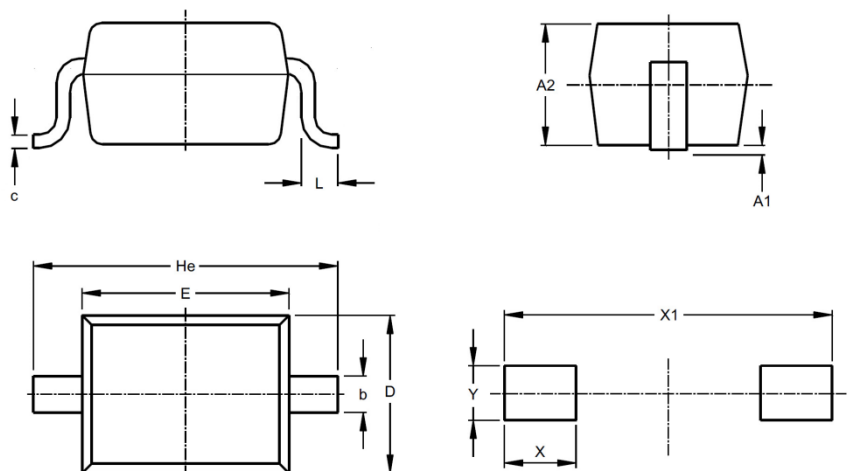


Insertion Loss S21



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.