

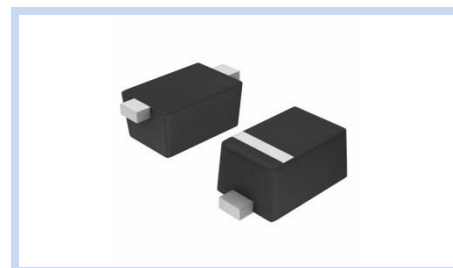
ESD Suppressor 5V Bidirectional SOD-523

ME51B9S523

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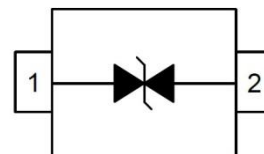
FEATURE

- 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

- High Speed Line: USB1.0/2.0,VGA,DVI,SDI
- Cellular Handsets and Accessoried
- Notebooks, Desktops, Servers
- Serial and Parallel Ports
- Peripherals



MAXIMUM RATINGS AND CHARACTERISTICS

Parameter	Symbol	Value	Unit
ESD Voltage (Contact discharge)	V_{ESD}	± 8	KV
ESD Voltage (Air discharge)		± 15	
Peak Pulse Power (tp=8/20 μ s)	P_{PP}	60	W
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	$I_{BR}=50\text{mA}$	V_{BR}	5.2	--	--	V
Reverse Leakage Current	$V_R=5\text{V}$	I_R	--	--	1	μA
Clamping Voltage	$I_{PP}=1\text{A}$, tp=8/20 μ s	V_C	--	--	9	V
Off State Junction Capacitance	$V_{dc}=0$, f=1MHz	C_J	--	3	6	pF

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

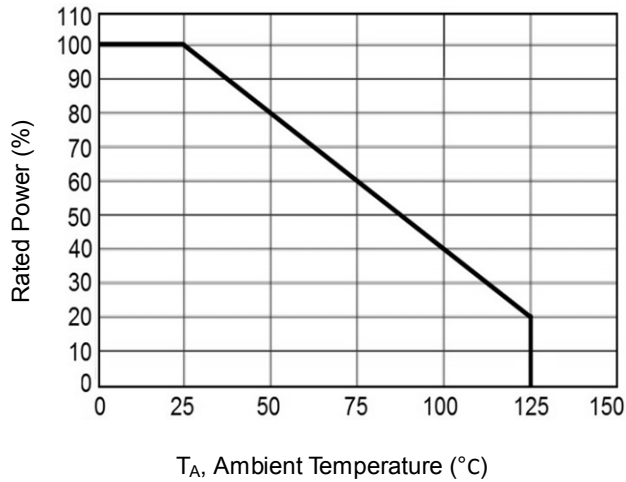
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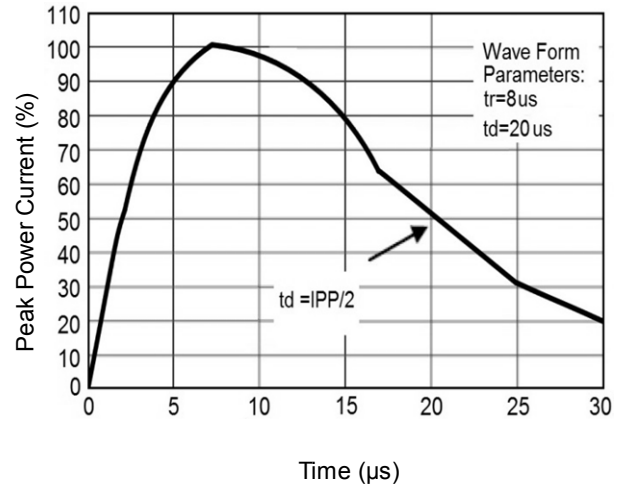
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CHARACTERISTIC CURVES

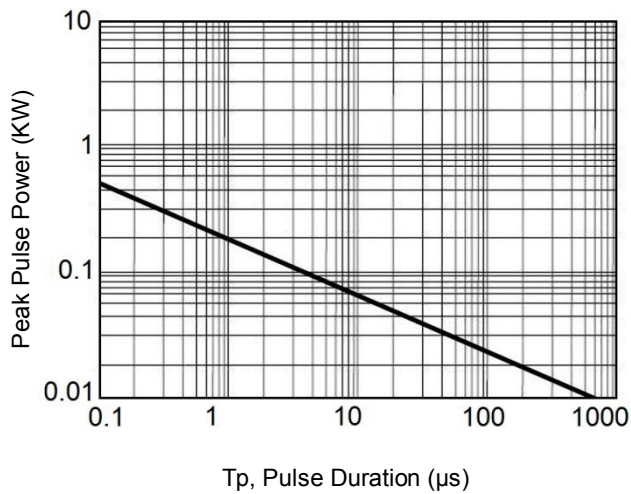
Derating Curve



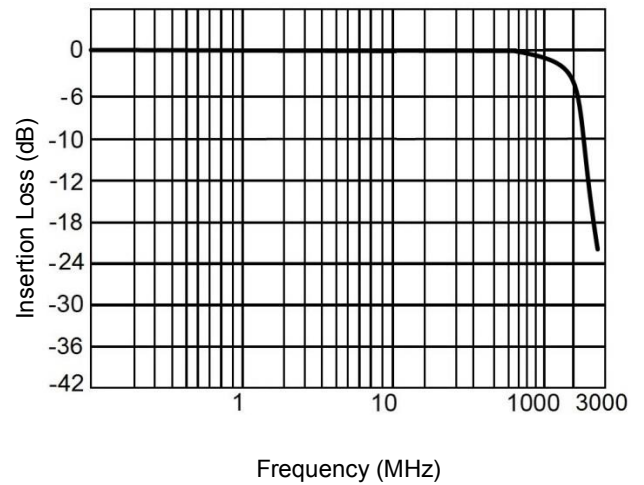
Pulse Waveforms



Non- Repetitive Peak Pulse Power vs. Pulse Time



Insertion Loss S21



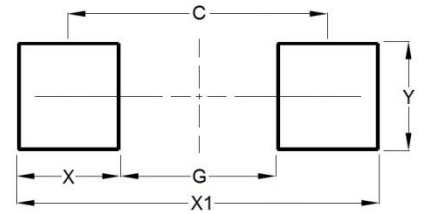
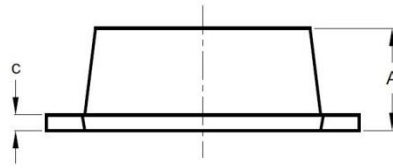
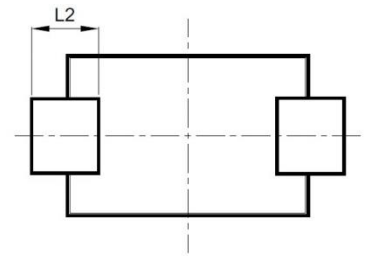
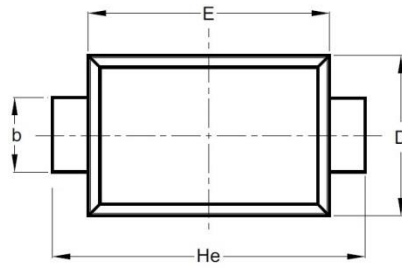
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DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A	0.51	0.70
b	0.25	0.35
C	0.08	0.15
D	0.75	0.85
E	1.10	1.30
He	1.50	1.70
L2	0.15	0.25
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.