

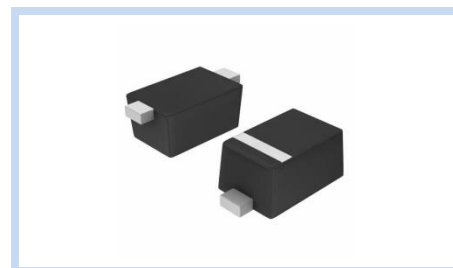
ESD Suppressor 28V Unidirectional SOD-523

ME281U45S523

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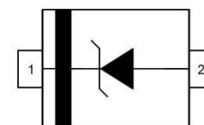
FEATURE

- IEC 61000-4-2 ESD: $\pm 20\text{KV}$ (Air) $\pm 15\text{KV}$ (Contact)
- IEC 61000-4-4 EFT: 40A (5/50ns)
- IEC 61000-4-5 Lightning: 3A (8/20 μs)
- ESD Protection for one Unidirectional Channel
- Low Leakage Current



APPLICATION

- LED Backlight
- Mobile Phones and Accessories
- Desktops, Servers, and Notebooks
- Computer Interface Protection
- Serial and Parallel Ports Protection



MAXIMUM RATINGS AND CHARACTERISTICS

Parameter	Symbol	Value	Unit
ESD Voltage (Contact discharge)	V_{ESD}	± 15	KV
ESD Voltage (Air discharge)		± 20	
Peak Pulse Power Dissipation (tp=8/20 μs)	P_{PP}	165	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}	--	--	28	V
Reverse Breakdown Voltage	$I_{BR}=1\text{mA}$	V_{BR}	29	--	35	V
Reverse Leakage Current	$V_R=28\text{V}$	I_R	--	--	0.5	μA
Clamping Voltage	$I_{PP}=1\text{A}$, tp=8/20 μs	V_C	--	38	45	V
	$I_{PP}=3\text{A}$, tp=8/20 μs		--	48	55	
Dynamic Resistance	tp=8/20 μs	R_D	--	5	--	Ω
Off State Junction Capacitance	Vdc=0, Bias, f=1MHz	C_J	--	--	25	pF

Notes:

1. $T_A=25^{\circ}\text{C}$ unless specified otherwise
2. A transient suppressor is selected according to the working peak reverse voltage (V_{RWM}), which should be greater than or equal to the DC or continuous peak operation voltage level.

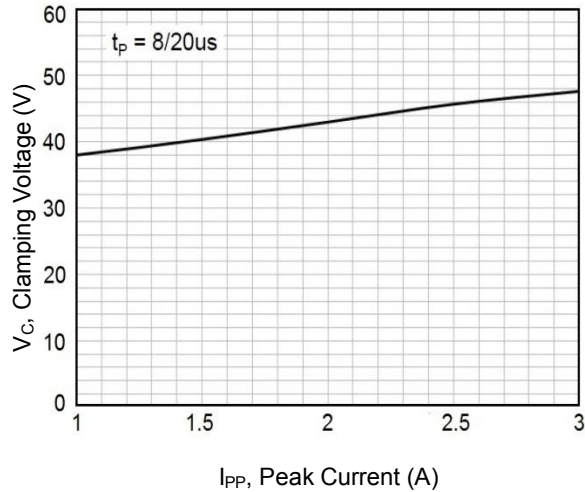
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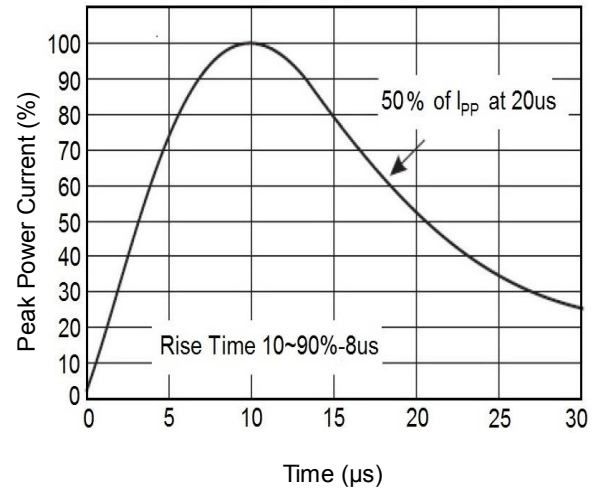
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CHARACTERISTIC CURVES

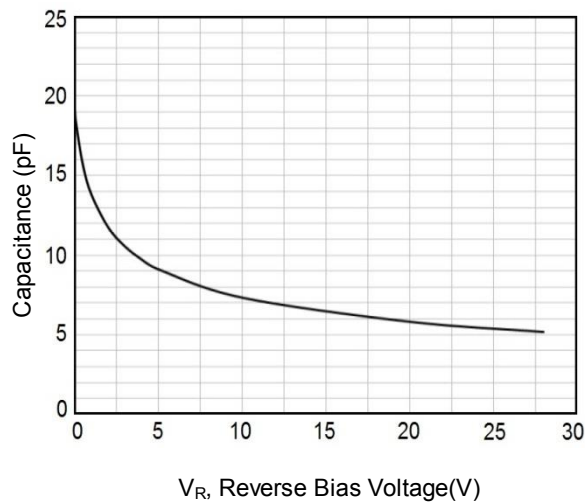
Typical Peak Clamping Voltage



Pulse Waveforms



Typical Junction Capacitance



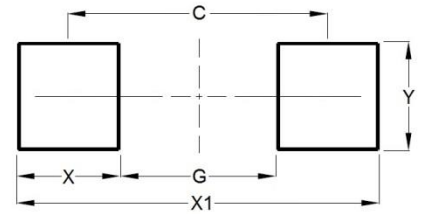
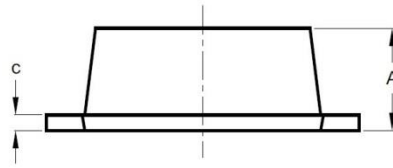
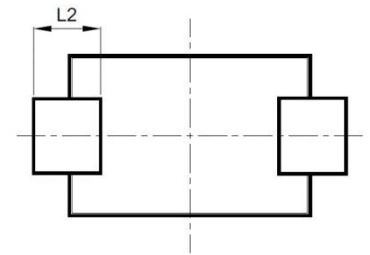
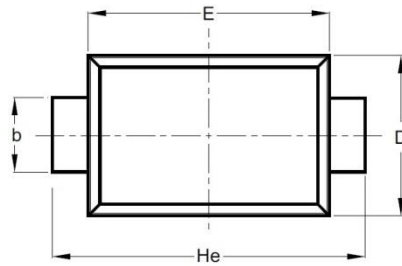
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DIMENSIONS AND RECOMMENDED LAND PATTERN

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.