

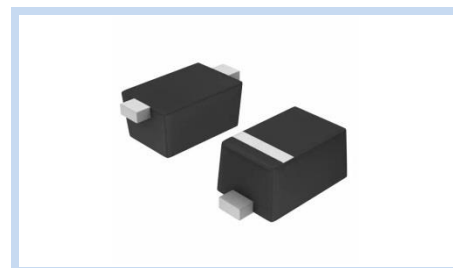
ESD Suppressor 7V Unidirectional SOD-523

ME71U12S523

MERITEK

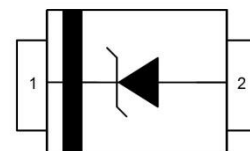
FEATURE

- IEC 61000-4-2 ESD: $\pm 30\text{KV}$ (Air) $\pm 30\text{KV}$ (Contact)
- ESD Protection for one Unidirectional Channel
- Low Leakage Current
- Low Clamping Voltage
- Solid-State Silicon Avalanche Technology



APPLICATION

- Cellular Handsets & Accessories
- Cordless Phones
- Personal Digital Assistants (PDAs)
- Notebooks & Handhelds
- Portable Instrumentation
- Digital Cameras & MP3 Players



MAXIMUM RATINGS AND CHARACTERISTICS

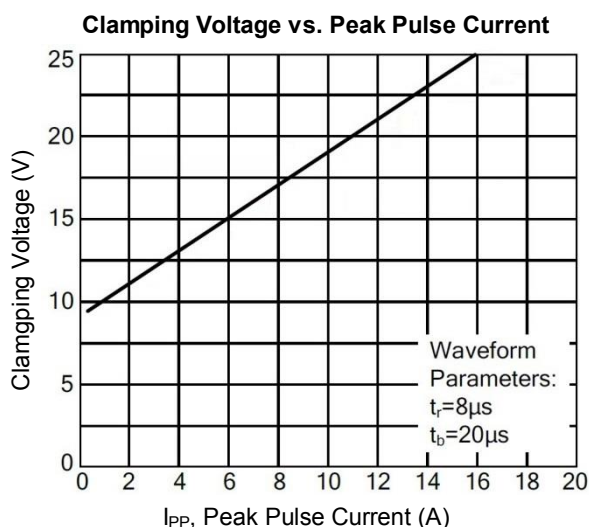
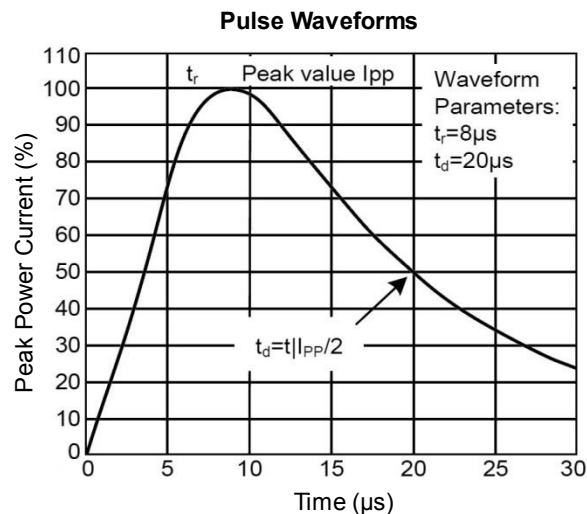
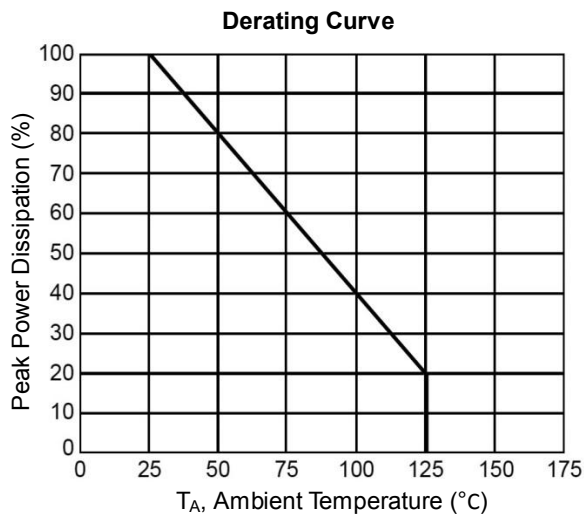
Parameter	Symbol	Value	Unit
ESD Voltage (Contact discharge)	V_{ESD}	± 30	KV
ESD Voltage (Air discharge)		± 30	
Peak Pulse Current ($t_p=8/20\mu s$)	I_{PP}	16	A
Operating & Storage Temperature Range	T_J, T_{STG}	-55~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS

Parameter	Condition	Symbol	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	--	V_{RWM}	--	--	7	V
Reverse Breakdown Voltage	$I_{BR}=1\text{mA}$	V_{BR}	7.5	--	--	V
Reverse Leakage Current	$V_R=7\text{V}$	I_R	--	--	1	μA
Clamping Voltage	$I_{PP}=1\text{A}, t_p=8/20\mu s$	V_C	--	--	12	V
	$I_{PP}=16\text{A}, t_p=8/20\mu s$		--	--	25	
Off State Junction Capacitance	$V_{dc}=0, f=1\text{MHz}$	C_J	--	190	--	pF

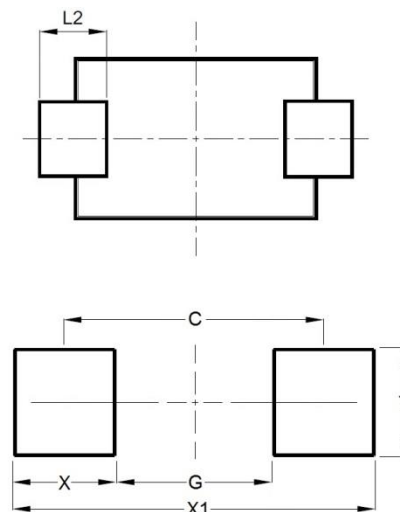
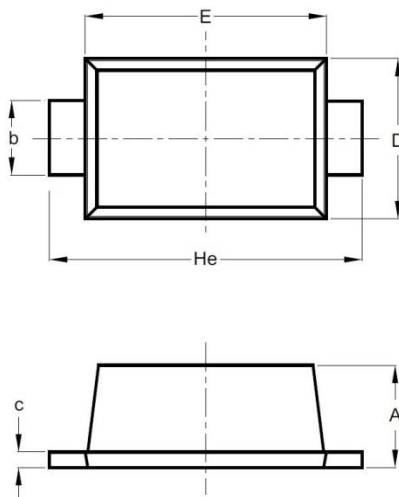
Notes: $T_J=25^{\circ}\text{C}$ unless otherwise specified

CHARACTERISTIC CURVES



DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A	0.50	0.70
b	0.25	0.35
C	0.07	0.20
D	0.70	0.90
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.