

ESD Suppressor

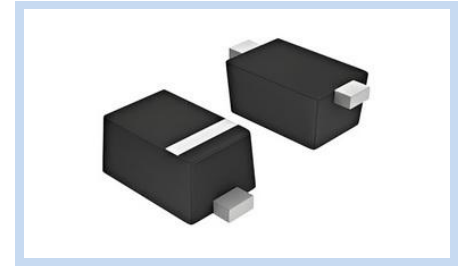
5V Unidirectional SOD-923

MEP51U4A0S923

MERITEK

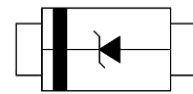
FEATURE

- IEC61000-4-2 (ESD): $\pm 25\text{KV}$ (Air), $\pm 20\text{KV}$ (Contact)
- IEC61000-4-4 (EFT): 40A(5/50ns)
- ESD Protection for One Unidirectional Channel
- Low Clamping Voltage and Low Leakage Current
- Application: High Speed Data Lines, Power Lines, Computers And Peripherals, Cellular Handsets



MECHANICAL DATA

- Case: SOD-923, Molded Epoxy Meets UL94V-0
- Terminals: Solderable per MIL-STD-750, Method 2026



ABSOLUTE MAXIMUM RATINGS

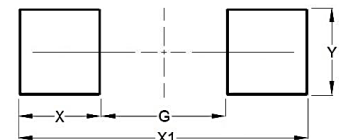
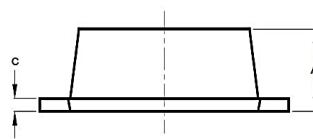
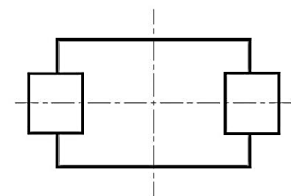
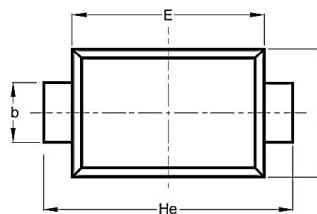
Parameter	Symbol	Value	Unit
ESD Discharge (IEC61000-4-2)	Air	± 25	KV
	Contact	± 20	
Peak Pulse Power (tp = 8/20 μ s waveform)	P _{PP}	50	W
Operating Junction Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS

Parameter, T _J = 25°C	Conditions	Symbol	Min	Typ.	Max	Unit
Reverse Stand-Off Voltage	--	V _{RWM}	-	-	5.0	V
Reverse Breakdown Voltage	I _{BR} =1mA	V _{BR}	6.0	-	-	V
Reverse Leakage Current	V _R =5.0V	I _R	-	0.1	1.0	μ A
Clamping Voltage (tp=8/20 μ s)	I _{PP} =1A	V _C	-	-	10	V
Peak Pulse Current (tp=8/20 μ s)	--	I _{PP}	-	-	4	A
Junction Capacitance	V _R =0V, f=1MHz	C _J	-	0.85	-	pF

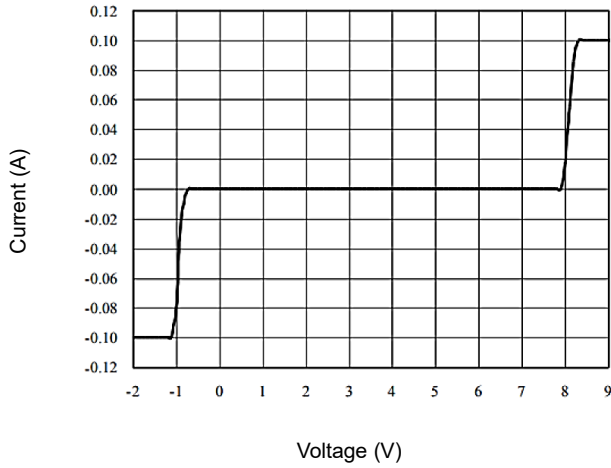
DIMENSIONS

Item	Min (mm)	Max (mm)
A	0.35	0.43
b	0.17	0.27
c	-	0.15
D	0.55	0.65
E	0.75	0.85
He	0.90	1.10
G	0.60	
X	0.30	
X1	1.20	
Y	0.40	

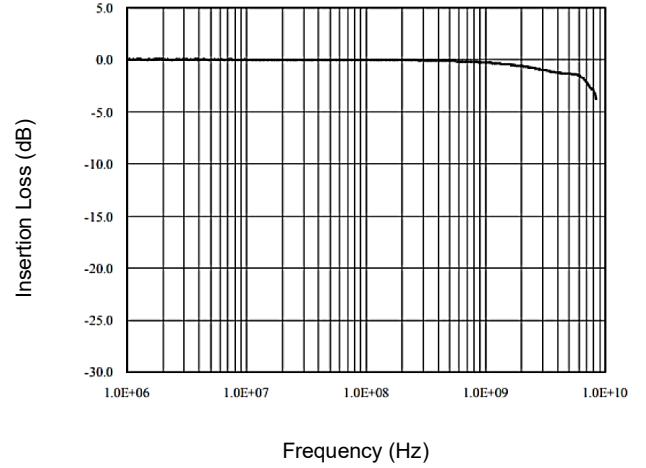


CHARACTERISTIC CURVES

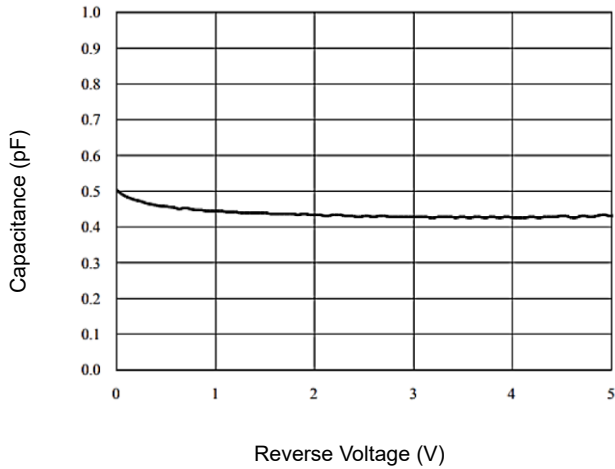
Voltage Sweeping of I/O to GND



Insertion Loss S21 of I/O to GND



Capacitance vs. Reverse Voltage



Normalized Capacitance vs. Reverse Voltage

