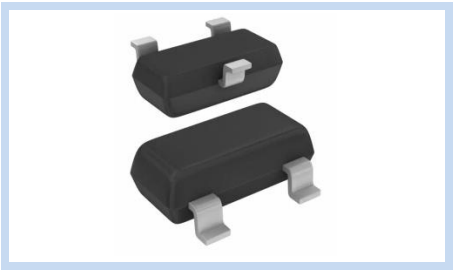
ESD Suppressor
24V 2-Bidirectional SOT-23

ME242B34S23

MERITEK

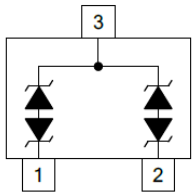
FEATURE

- IEC 61000-4-2 ESD: ±30KV (Air) ±30KV (Contact)
- IEC 61000-4-5 Lightning: 5A (8/20μs)
- ESD Protection for two Bidirectional Channels
- Low Clamping Voltage
- Low Leakage Current



APPLICATION

- CAN Bus Protection
- Automotive Applications
- Microprocessors Protection
- Notebooks, Desktops and Servers
- Serial and Parallel Ports Protection



RoHS

MAXIMUM RATINGS AND CHARACTERISTICS

Parameter	Symbol	Value	Unit
ESD Voltage (Contact discharge)	V_{ESD}	±30	KV
ESD Voltage (Air discharge)		±30	
Peak Pulse Current (tp=8/20μs)	I_{PP}	7	A
Peak Pulse Power (tp=8/20μs)	P_{PP}	350	W
Operating Temperature Range	T_J	-55~+125	˚C
Storage Temperature Range	T_{STG}	-55~+150	˚C

ELECTRICAL CHARACTERISTICS

Parameter	Condition	Symbol	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	--	V_{RWM}	--	--	24	V
Reverse Breakdown Voltage	I_{BR}=1mA	V_{BR}	26.2	--	--	V
Reverse Leakage Current	V_{RWM}=24V	I_R	--	1	10	nA
Clamping Voltage	I_{PP}=1A, tp=8/20μs	V_C	--	--	34	V
	I_{PP}=7A, tp=8/20μs		--	50	60	
Off State Junction Capacitance	Vdc=0, f=1MHz	C_J	--	28	40	pF

Notes: T_A= 25ºC unless otherwise specified

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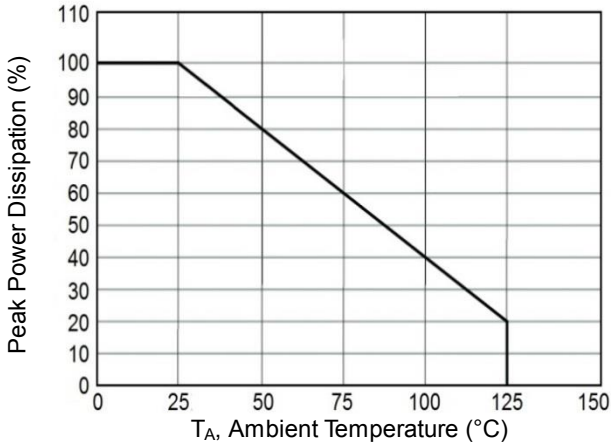
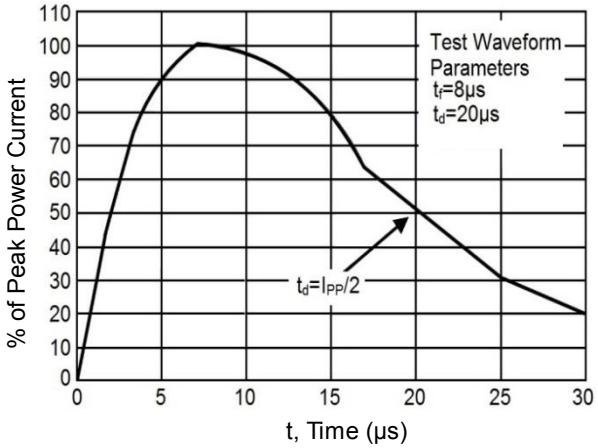
CHARACTERISTIC CURVES

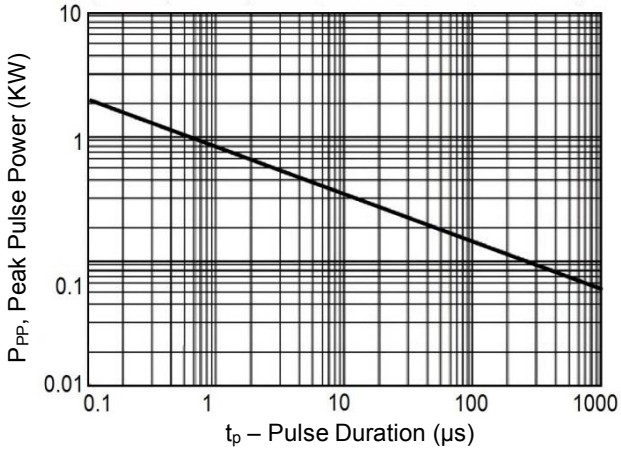
Power Derating Curve



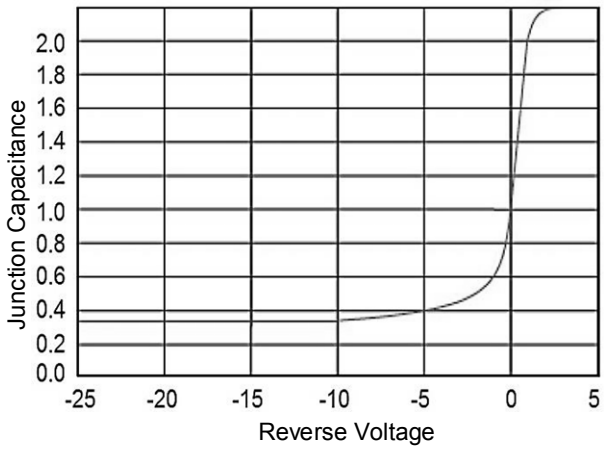
Pulse Waveforms



Non-Repetitive Peak Pulse vs. Pulse Time

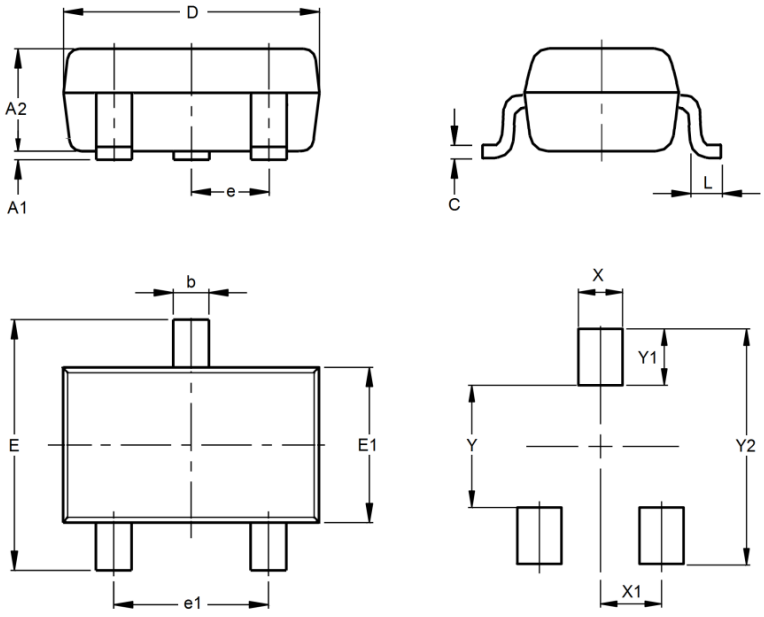


Junction Capacitance vs Reverese Voltage



DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A1	0.08	0.20
A2	0.81	1.20
b	0.30	0.50
C	0.00	0.10
D	2.70	3.10
e	--	--
e1	1.78	2.04
E	2.10	2.80
E1	1.20	1.60
L	0.15	--
X	0.80	0.80
X1	1.35	1.35
Y	2.90	2.90
Y1	0.90	0.90
Y2	2.00	2.00



*Specifications subject to change without notice.