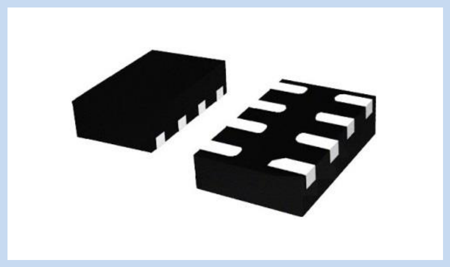
ESD Supressor
3V 2-Bidirectional DFN2010

ME32B15D2010

MERITEK

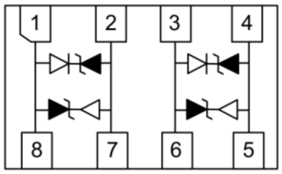
FEATURE



- IEC 61000-4-2 ESD: ±20KV (Air) ±20KV (Contact)
- ESD Protection for two Bidirectional Channels
- Low Leakage Current
- Low Clamping Voltage
- Solid-State Silicon-Avalanche Technology

APPLICATION

- 10/100/1000 Ethernet
- LAN/WAN Device
- Switching Systems
- Computers
- Instruments



MAXIMUM RATINGS AND CHARACTERISTICS

Parameter	Symbol	Value	Unit
ESD Voltage (Contact discharge)	V_{ESD}	±20	KV
ESD Voltage (Air discharge)		±20	
Peak Pulse Current (tp=8/20μs)	I_{PP}	3	A
Operating & Storage Temperature Range	T_J, T_{STG}	-55~+150	°C

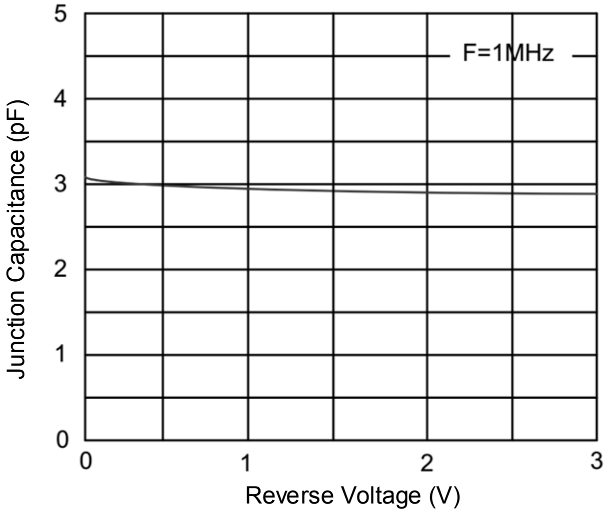
ELECTRICAL CHARACTERISTICS

Parameter	Condition	Symbol	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	--	V_{RWM}	--	--	3	V
Reverse Breakdown Voltage	I_{BR}=1mA	V_{BR}	3.5	--	--	V
Reverse Leakage Current	V_R=3V	I_R	--	--	1	μA
Clamping Voltage	I_{PP}=3A, tp=8/20μs	V_C	--	15	--	V
Off State Junction Capacitance	Vdc=0, f=1MHz	C_J	--	3	--	pF

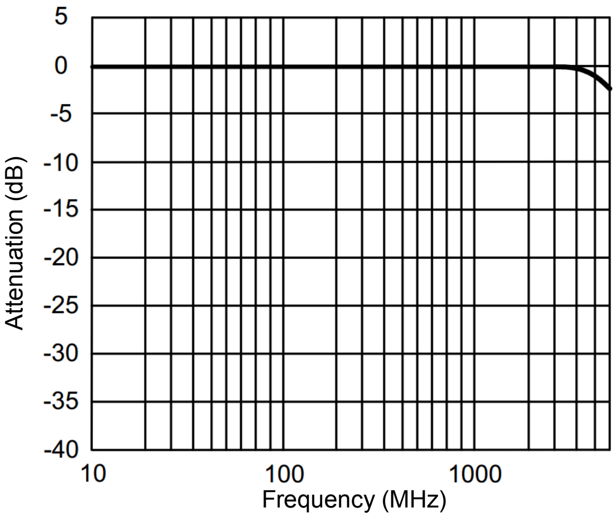
Notes:
1. T_J= 25ºC unless otherwise specified

CHARACTERISTIC CURVES

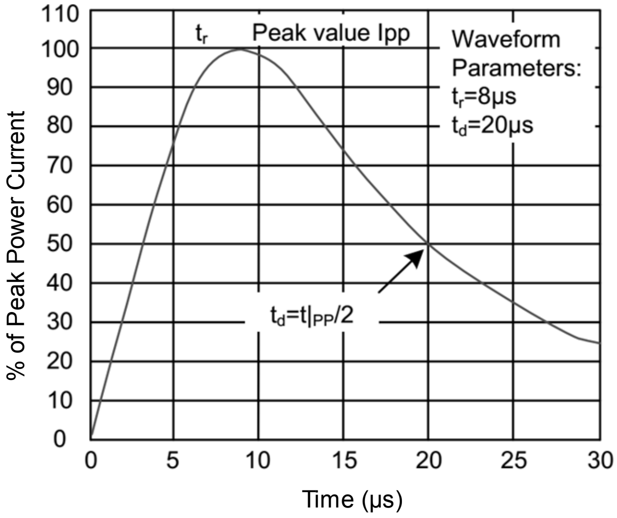
Capacitance vs. Bias Voltage



Insertion Loss (S21) I/O to GND



Pulse Waveform



DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A	0.45	0.55
A1	0.00	0.04
A3	0.11	0.11
b	0.20	0.30
D	1.92	2.07
E	0.92	1.07
e	0.50	0.50
L	0.27	0.42
C	0.50	0.50
X	0.30	0.30
X1	1.80	1.80
Y	0.60	0.60
Y1	1.40	1.40