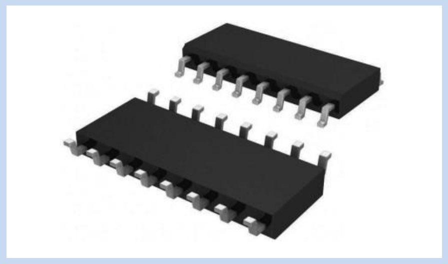
ESD Supressor
3.3V 8-Bidirectional SOIC-16

ME3V38B7SO16

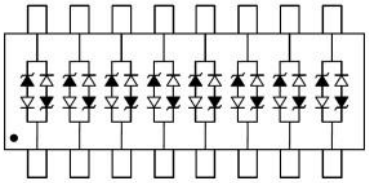
MERITEK

FEATURE



- IEC 61000-4-2 ESD: ±30KV (Air) ±30KV (Contact)
- ESD Protection for eight Bidirectional Channels
- Low Leakage Current
- Low Capacitance and Clamping Voltages
- Solid-State Silicon-Avalanche Technology

APPLICATION



- Wireless Communication Circuit
- WAN Equipment
- CSU/DSU
- Multi Plexers
- Routers
- ISP Equipment

MAXIMUM RATINGS AND CHARACTERISTICS

Parameter	Symbol	Value	Unit
ESD Voltage (Contact discharge)	V_{ESD}	±30	KV
ESD Voltage (Air discharge)		±30	
Peak Pulse Power(tp=8/20µs)	P_{PP}	500	W
Operating & Storage Temperature Range	T_J, T_{STG}	-55~+150	˚C

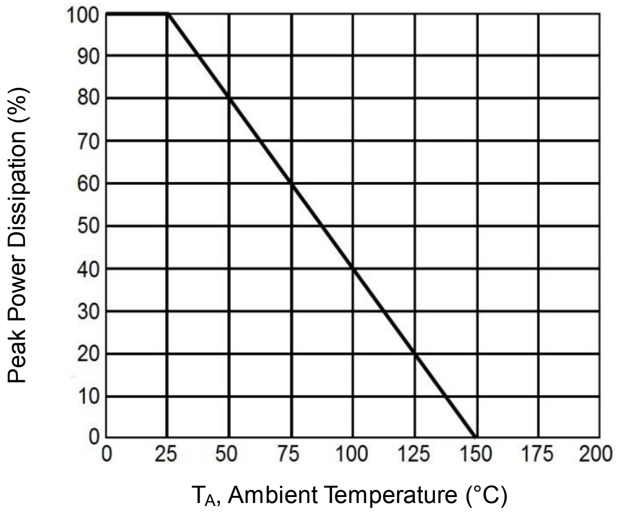
ELECTRICAL CHARACTERISTICS

Parameter	Condition	Symbol	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	--	V_{RWM}	--	--	3.3	V
Reverse Breakdown Voltage	I_{BR}=1mA	V_{BR}	4.5	--	--	V
Reverse Leakage Current	V_R=3.3V, Each I/O Pin	I_R	--	--	40	µA
Clamping Voltage	I_{PP}=1A, tp=8/20µs	V_C	--	--	7	V
	I_{PP}=10A, tp=8/20µs		--	--	15	
Off State Junction Capacitance	Vdc=0, f=1MHz, Between I/O pins and GND	C_J	--	--	15	pF

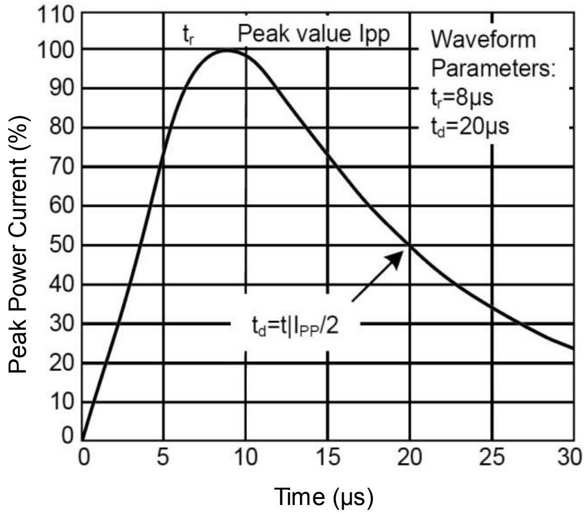
Notes: T_J= 25ºC unless otherwise specified

CHARACTERISTIC CURVES

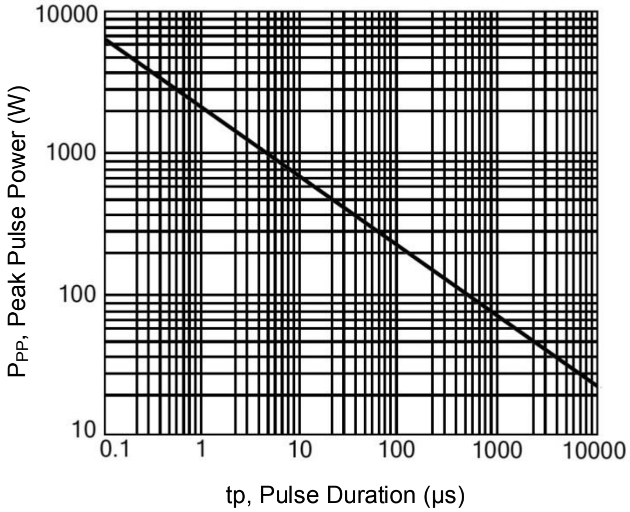
Derating Curve



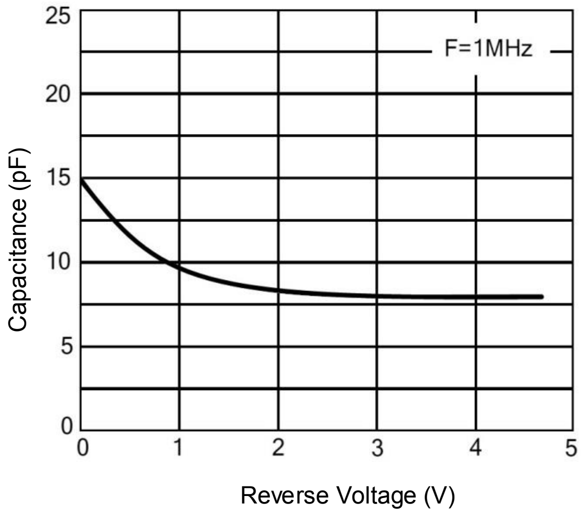
Pulse Waveforms



Non-Repetitive Peak Pulse vs. Pulse Time

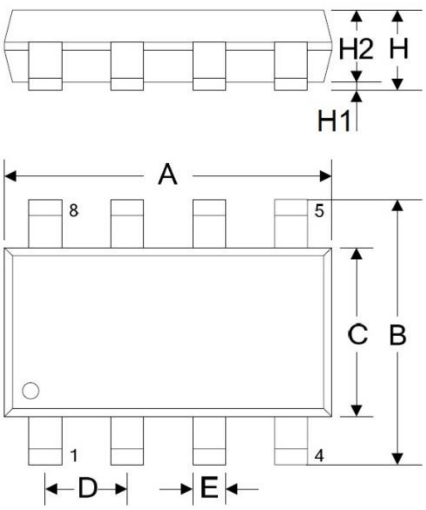


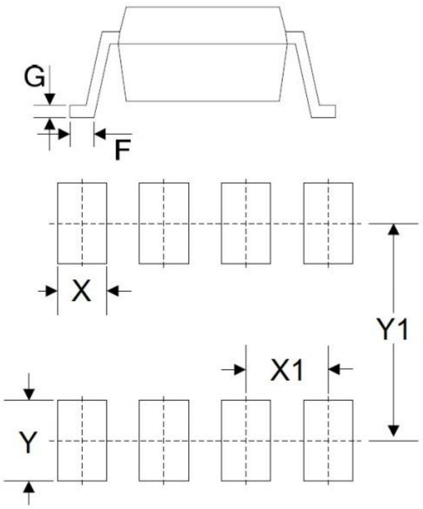
Capacitance vs. Reverse Voltage



DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A	4.80	5.00
B	5.80	6.20
C	3.80	4.00
D	1.27	1.27
E	0.33	0.51
F	0.40	1.27
G	0.19	0.25
H	1.35	1.75
H1	0.10	0.25
H2	1.45	1.45
X	0.73	0.73
X1	1.27	1.27
Y	1.20	1.20
Y1	6.60	6.60





*Specifications subject to change without notice.