

Features

- Ultra low capacitance: 0.3pF(IO to IO)
- Ultra low leakage: nA level
- Low operating voltage: 5V
- Low clamping voltage
- Protects one power line and four data lines
- Flow-through package
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
Air discharge: $\pm 25\text{kV}$
Contact discharge: $\pm 20\text{kV}$
 - IEC61000-4-4 (EFT) 40A (5/50ns)
 - IEC61000-4-5 (Lightning) 5A (8/20 μs)
- RoHS Compliant

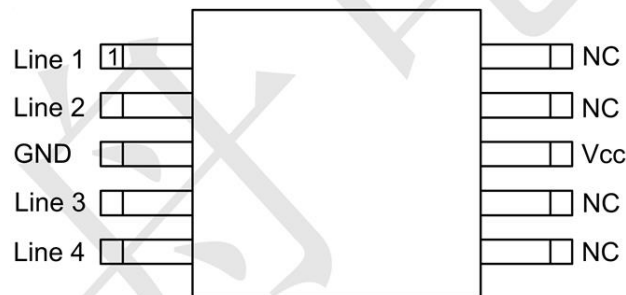
Mechanical Characteristics

- Package: MSOP-10
- Lead Finish: Matte Tin
- Case Material: "Green" Molding Compound.
- UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 3 per J-STD-020
- Shipping Qty :3000pcs/13Inch Tape & Reel

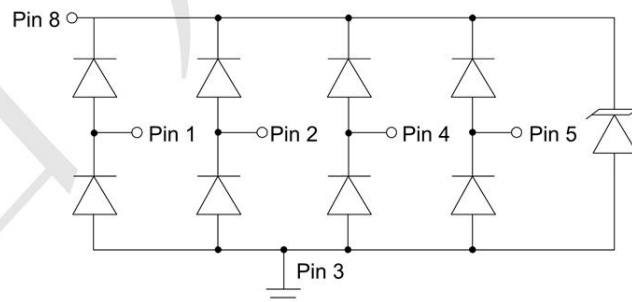
Applications

- DVI Ports
- HDMI Ports
- Set Top Box
- Projection TV
- Notebook Computers
- 10/100/1000 Ethernet

Dimensions and Pin Configuration



Marking: 544M



Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	P _{pk}	100	W
Peak Pulse Current (8/20μs)	I _{PP}	5	A
ESD per IEC 61000-4-2 (Air)	V _{ESD}	±25	kV
ESD per IEC 61000-4-2 (Contact)		±20	
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{stg}	-55 to +150	°C

Electrical Characteristics (T_A=25°C unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	V _{RWM}			5	V	Any I/O pin to ground
Breakdown Voltage	V _{BR}	6			V	I _T = 1mA, any I/O pin to ground
Reverse Leakage Current	I _R			1	μA	V _{RWM} = 5V, any I/O pin to ground
Clamping Voltage	V _C			14	V	I _{PP} = 1A (8 x 20μs pulse), any I/O pin to ground
Clamping Voltage	V _C			20	V	I _{PP} = 5A (8 x 20μs pulse), any I/O pin to ground
Junction Capacitance	C _J		0.7	1	pF	V _R = 0V, f = 1MHz, any I/O pin to ground
Junction Capacitance	C _J		0.3	0.6	pF	V _R = 0V, f = 1MHz, between I/O pins

Typical Performance Characteristics ($T_A=25^\circ\text{C}$ unless otherwise Specified)

Fig1. 8/20 μs Pulse Waveform

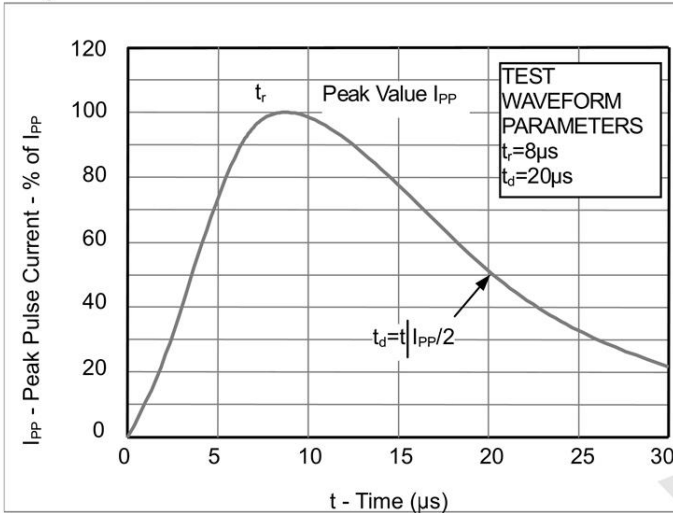


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

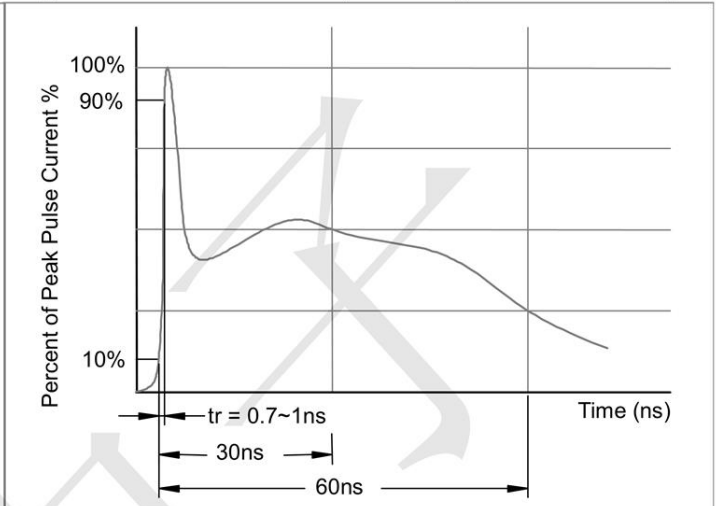
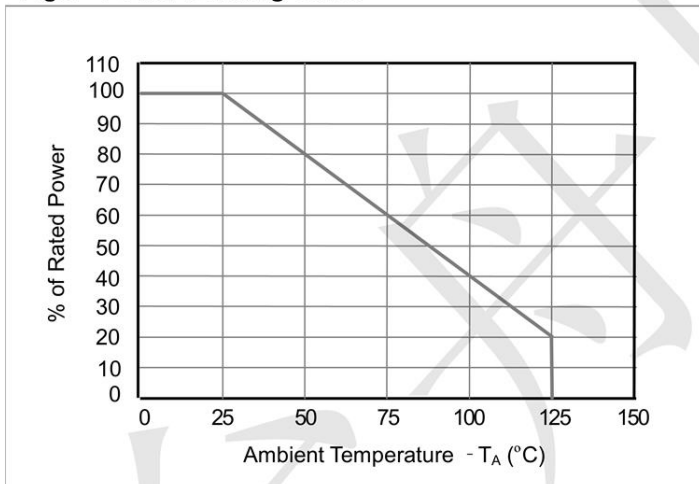
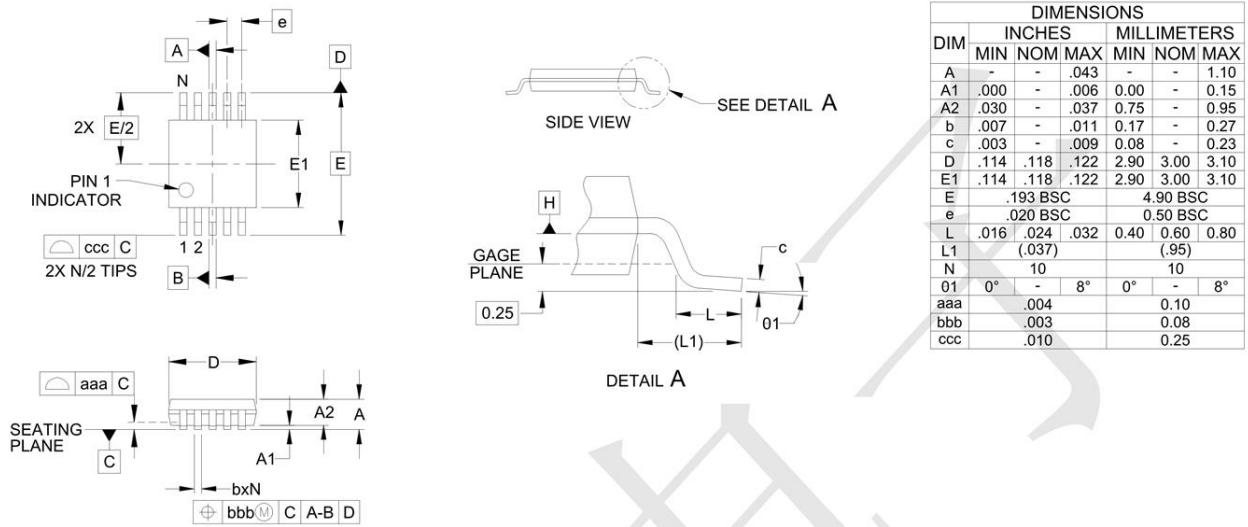


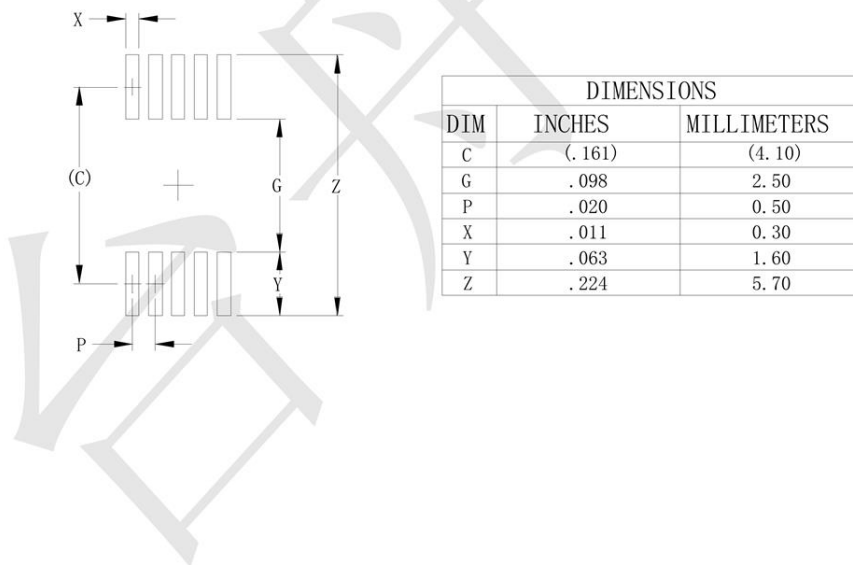
Fig3. Power Derating Curve



Outline Drawing -MSOP10



Land Pattern -MSOP-10



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