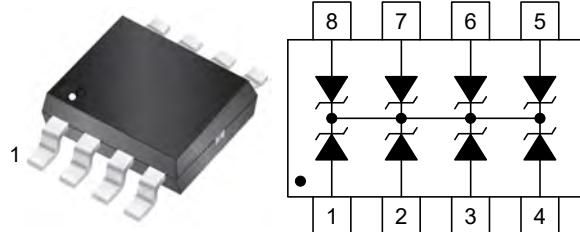


Features

- 300Watts peak pulse power ($t_p = 8/20\mu s$)
- SOIC-8 Package
- Protects Seven I/O lines
- Low clamping voltage
- Low leakage current
- Low capacitance
- Transient protection for high-speed data lines to :
 - IEC 61000-4-2 (ESD) $\pm 30kV$ (air), $\pm 30kV$ (contact)
 - IEC 61000-4-4 (EFT) 40A (5/50ns)
 - IEC 61000-4-5 (Lightning) 12A (8/20 μs)



Mechanical Data

- **Case:** SOIC-8 (plastic package).
Lead free; RoHS compliant; Halogen free
- **Molding Compound Flammability Rating:**
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:
260 °C/10 sec. at terminals

Applications

- I²C serial ports
- LAN/WAN equipment
- Set Top Box (STB)
- Peripherals
- Microprocessor based equipment
- Notebooks, desktops, servers
- RS-232 and RS-422 data line protection

Absolute Maximum Ratings

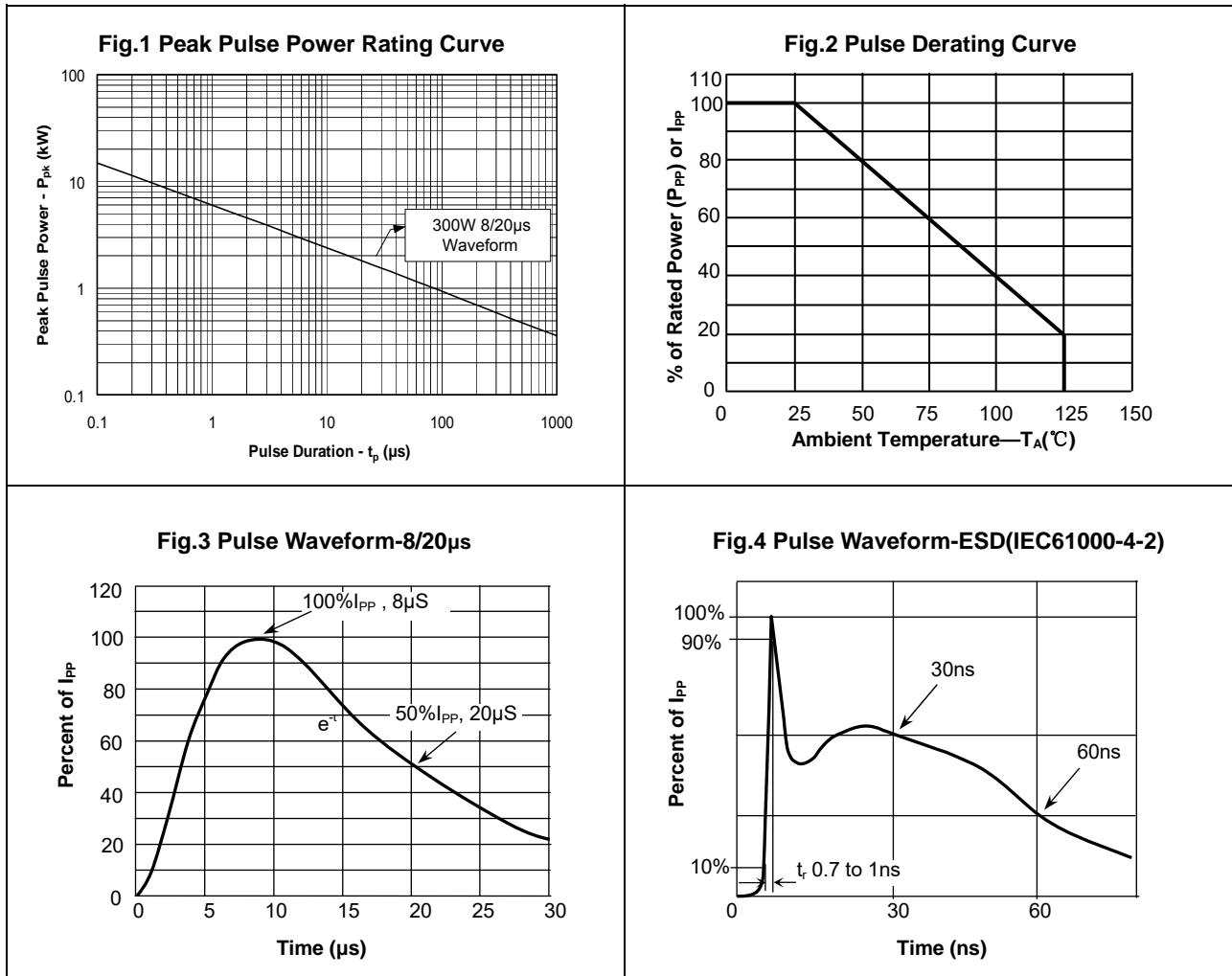
Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_p=8/20\mu s$)	P _{PP}	300	W
ESD contact/air discharge (IEC-61000-4-2)	V _{ESD}	30/30	kV
Peak Pulse Current ($t_p = 8/20\mu s$)	I _{PP}	12	A
Junction Temperature	T _J	-55 to +125	°C
Storage temperature	T _{STG}	-55 to +150	°C

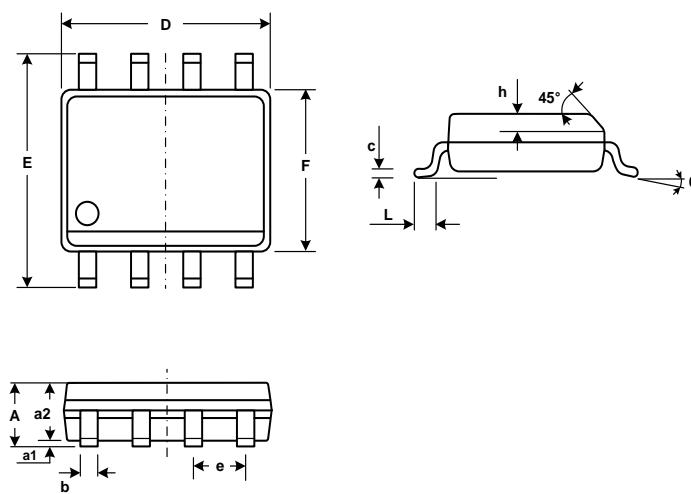
Electrical Characteristics

($T_A = 25$ °C unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V _{RWM}				15	V
Reverse Breakdown Voltage	V _{BR}	I _T =1mA	16.7			V
Reverse Leakage Current	I _R	V _R =15V			0.5	μA
Clamping Voltage	V _c	I _{PP} =12A, T _p =8/20 μs			27	V
Junction Capacitance	C _J	V _R =0V, f=1MHz; Between I/O pins and GND		30		pF

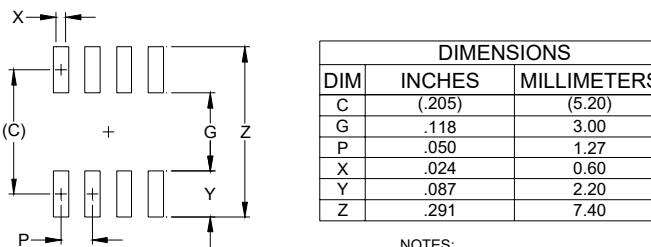
Typical Characteristics ($T_{amb} = 25^{\circ}\text{C}$ unless otherwise specified)


Package Dimensions



DIMENSIONS				
SYMBOL	INCHES		MILLIMETER	
	MIN	MAX	MIN	MAX
A	0.053	0.069	1.35	1.75
a1	0.004	0.010	0.10	0.25
a2	0.049	0.065	1.25	1.65
D	0.189	0.197	4.80	5.00
F	0.150	0.157	3.80	4.00
E	0.236BSC		6.00BSC	
b	0.012	0.020	0.31	0.51
e	0.050BSC		1.27BSC	
h	0.010	0.020	0.25	0.50
c	0.007	0.010	0.17	0.25
L	0.016	0.041	0.40	1.04
θ	0	8°	0	8°

Pad Dimensions

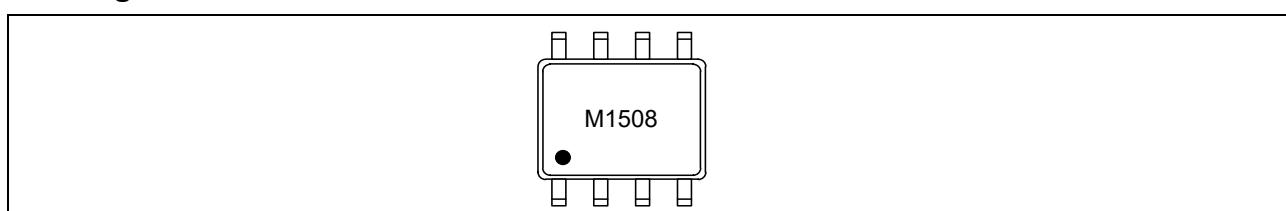


DIM	INCHES	MILLIMETERS
C	(.205)	(5.20)
G	.118	3.00
P	.050	1.27
X	.024	0.60
Y	.087	2.20
Z	.291	7.40

NOTES:

1. THIS LAND PATTERN IS FOR REFERENCE PURPOSES ONLY. CONSULT YOUR MANUFACTURING GROUP TO ENSURE YOUR COMPANY'S MANUFACTURING GUIDELINES ARE MET.
2. REFERENCE IPC-SM-782A, RLP NO. 300A.

Marking



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
YEDSOP81512AV	SOIC-8	Tape and reel	2500pcs / reel	EIA STD RS-481