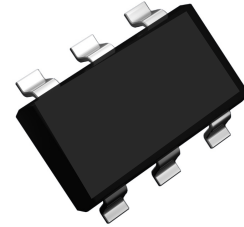
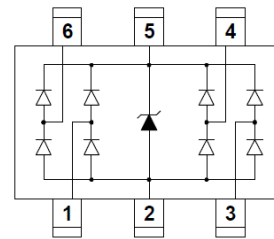


Features

- 360 watts peak pulse power ($t_p = 8/20\mu s$)
- SOT-23-6L package
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low capacitance
- ESD Protection for high-speed data lines to:
 - IEC 61000-4-2 $\pm 25KV$ contact $\pm 25KV$ air
 - IEC 61000-4-4 (EFT) 40A (5/50ns)
 - IEC 61000-4-5 (Lightning) 12A (8/20 μs)
- RoHS compliant



Package: SOT-23-6L



Schematic Diagram

Applications

- Video/Graphics card
- Digital visual interface (DVI)
- USB2.0 power and data lines protection
- Notebook and PC computers
- Monitors and flat panel displays

Absolute Maximum Ratings ($T_A = 25^\circ C$ unless otherwise specified)

| Parameter | Symbol | Value | Unit |
|--|-----------|-------------|------------|
| Peak Pulse Power ($t_p = 8/20\mu s$) | P_{PP} | 360 | W |
| Peak Pulse Current ($t_p = 8/20\mu s$) | I_{PP} | 12 | A |
| Junction Temperature | T_J | -55 to +125 | $^\circ C$ |
| Storage Temperature | T_{STG} | -55 to +150 | $^\circ C$ |

Electrical Characteristics ($T_A = 25^\circ C$ unless otherwise specified)

| Parameter | Symbol | Condition | Min | Typ | Max | Unit |
|---------------------------|-----------|----------------------------------|-----|-----|-----|---------|
| Reverse Stand-off Voltage | V_{RWM} | | | | 5 | V |
| Reverse Breakdown Voltage | V_{BR} | $I_T = 1mA$ | 5.8 | | | V |
| Reverse Leakage Current | I_R | $V_R = 5V$ | | | 5 | μA |
| Clamping Voltage (surge) | V_C | $I_{PP} = 12A, T_P = 8/20\mu s$ | | 15 | 30 | V |
| Trigger Voltage (ESD) | V_T | $V_{ESD} = +8kV$ | | 100 | | V |
| Clamping Voltage (ESD) | V_C | $V_{ESD} = +8kV$ | | 15 | | V |
| Junction Capacitance | C_J | $V_R = 0V, f = 1MHz, I/O$ to GND | | 3.0 | 5.0 | pF |
| | C_J | $V_R = 0V, f = 1MHz, I/O$ to I/O | | 1.5 | | pF |

Typical Characteristic Curves

Fig.1 Peak Pulse Power Rating Curve

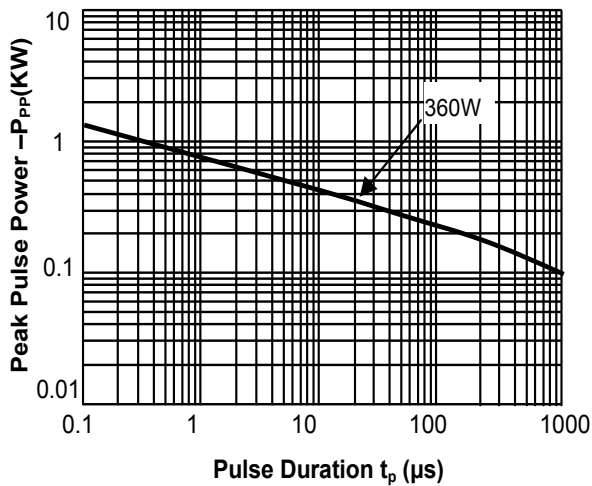


Fig.2 Pulse Derating Curve

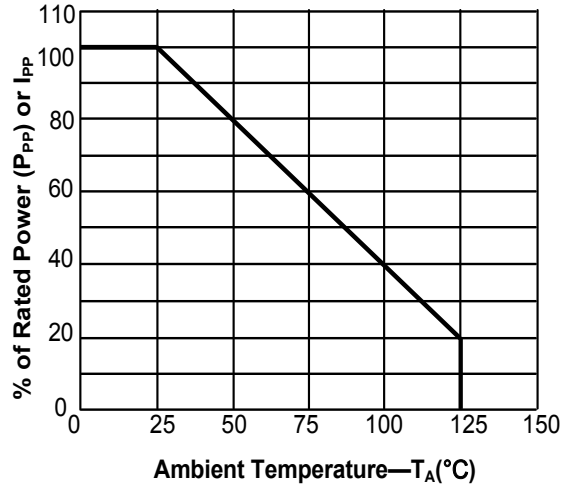


Fig.3 Pulse Waveform-8/20 μs

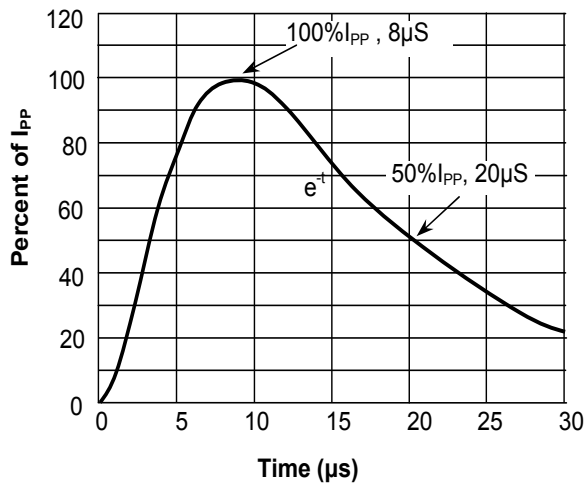
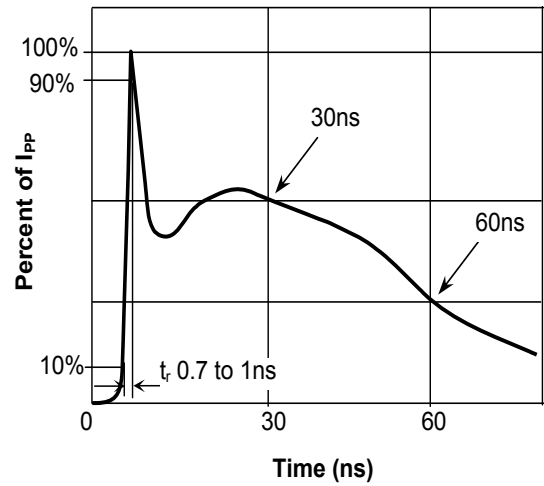
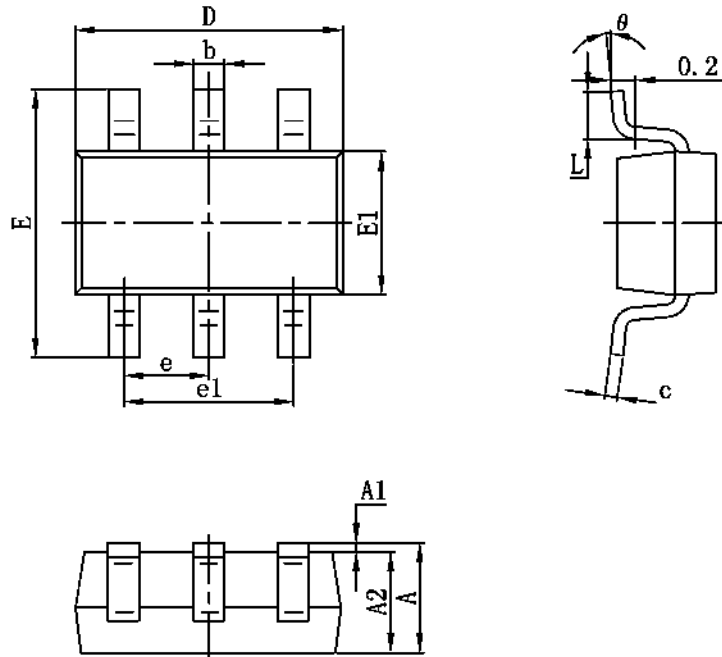


Fig.4 Pulse Waveform-ESD(IEC61000-4-2)



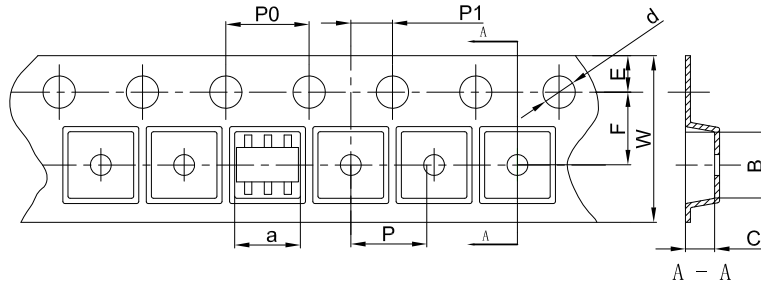


Product Dimensions



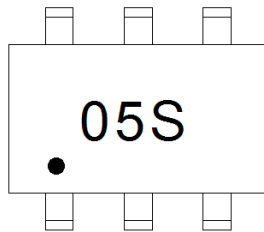
| Symbol | Dimensions in millimeters | | Dimensions in inches | |
|----------|---------------------------|-------|----------------------|-------|
| | Min | Max | Min | Max |
| A | 1.050 | 1.250 | 0.041 | 0.049 |
| A1 | 0.000 | 0.100 | 0.000 | 0.004 |
| A2 | 1.050 | 1.150 | 0.041 | 0.045 |
| b | 0.300 | 0.500 | 0.012 | 0.020 |
| c | 0.100 | 0.200 | 0.004 | 0.008 |
| D | 2.820 | 3.020 | 0.111 | 0.119 |
| E1 | 1.500 | 1.700 | 0.059 | 0.067 |
| E | 2.650 | 2.950 | 0.104 | 0.116 |
| e | 0.950(BSC) | | 0.037(BSC) | |
| e1 | 1.800 | 2.000 | 0.071 | 0.079 |
| L | 0.300 | 0.600 | 0.012 | 0.024 |
| θ | 0° | 8° | 0° | 8° |

Package Information



| Dimensions are in millimeter | | | | | | | | | | |
|------------------------------|------|------|------|-------|------|------|------|------|------|------|
| Pkg type | a | B | C | d | E | F | P0 | P | P1 | W |
| SOT-23-6 | 3.17 | 3.23 | 1.37 | Ø1.55 | 1.75 | 3.50 | 4.00 | 4.00 | 2.00 | 8.00 |

Marking



Order Information

| Device | Package | Carrier | Quantity | HSF Status |
|------------------|---------|------------------|----------------|----------------|
| SPESLC5VT236S-6U | SOT23-6 | Tape & Reel (7") | 3000pcs / Reel | RoHS Compliant |