

1.Description

The PDT5301 is a transient voltage suppressor (TVS) array, designed for power or data line applications that provide protection against ESD, tertiary lightning and switching transients. The device offers low clamping voltage for the protection of sensitive interfaces.

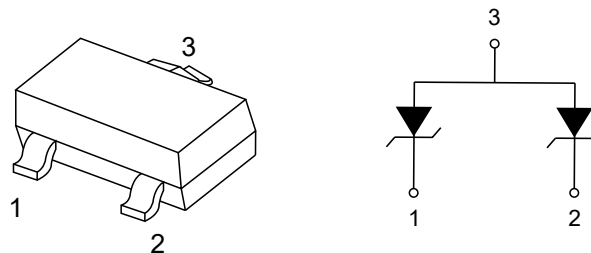
3.Features

- Compatible with IEC 61000-4-2 (ESD):
Air $\pm 15\text{kV}$, Contact $\pm 8\text{kV}$
- Compatible with IEC 61000-4-4 (EFT):
40A, 5/50ns
- Low Clamping Voltage
- Bidirectional Configuration

2.Applications

- RS-232, RS-422 & RS-423
- Cellular Phones
- Controlling & Monitoring
- Systems
- Handheld Devices
- Wireless Bus Protection

4.Pinning information



SOT-23



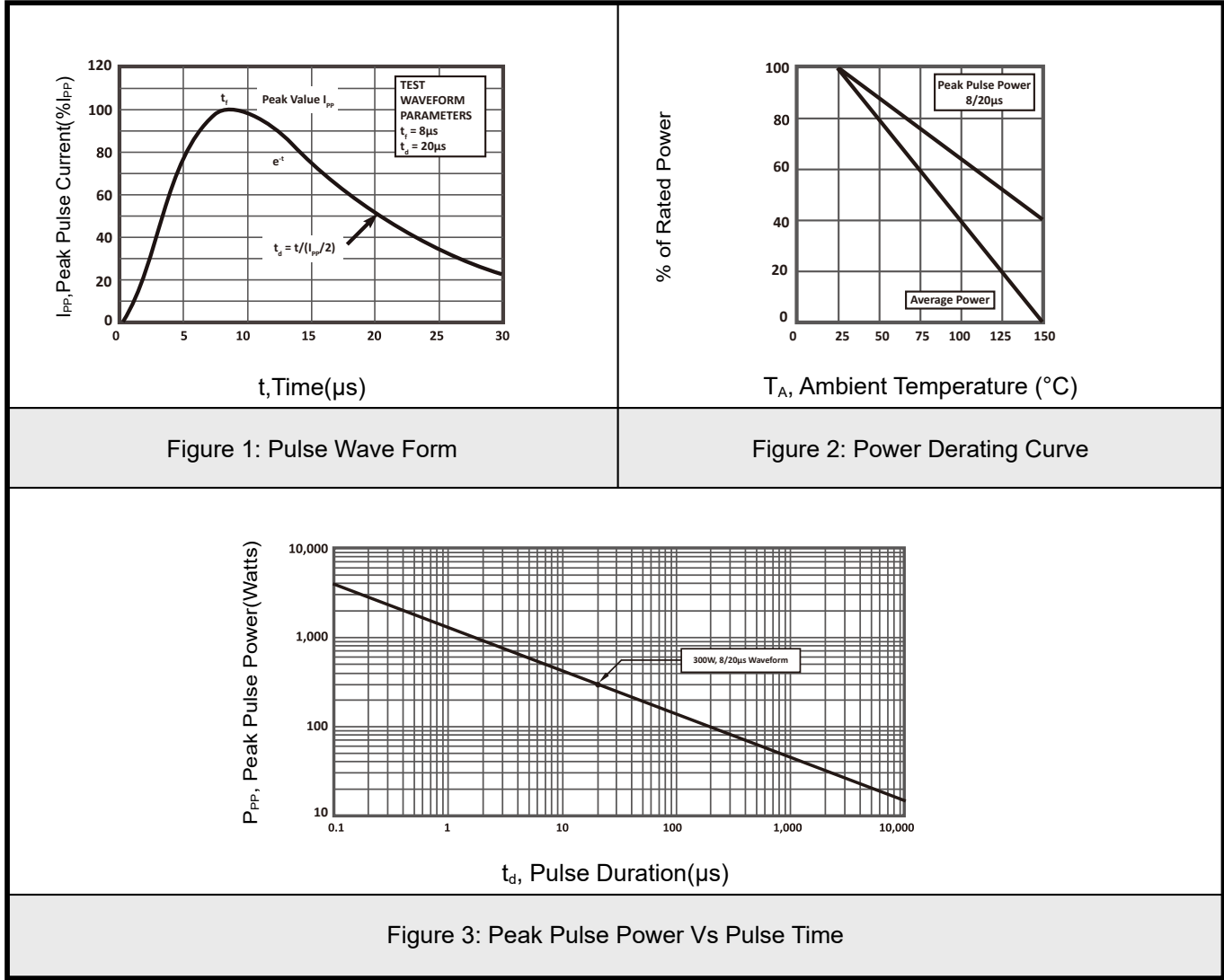
5. Absolute Maximum Ratings ($T_J=25^{\circ}\text{C}$, unless otherwise specified)

| Parameter | Symbol | Value | Units |
|---|-----------|------------|--------------------|
| Peak Pulse Power ($t_p=8/20\mu\text{s}$) - See Figure 1 | P_{PP} | 300 | Watts |
| Junction Temperature | T_L | -55 to 150 | $^{\circ}\text{C}$ |
| Storage Temperature | T_{STG} | -55 to 150 | $^{\circ}\text{C}$ |

| PART NUMBER | DEVICE MARKING | RATED STAND-OFF VOLTAGE | MINIMUM BREAKDOWN VOLTAGE | MAXIMUM CLAMPING VOLTAGE(Fig. 2) | MAXIMUM CLAMPING VOLTAGE(Fig. 2) | MAXIMUM LEAKAGE CURRENT | TYPICAL CAPACITANCE |
|----------------|-------------------|-------------------------------|---------------------------------|--|--|-------------------------------|------------------------|
| | | | @ 1mA | @ $I_P=1\text{A}$ | @ $8/20\mu\text{s}$ | @ V_{WM} | @0V,1MHz |
| | | V_{WM} | $V_{(BR)}$ | V_C | V_C | I_D | C |
| | | VOLTS | VOLTS | VOLTS | @ I_{PP} | μA | pF |
| PDT5301 | 2C3 | 12 | 13.3 | 19 | 28V@11A | 1 | 90 |

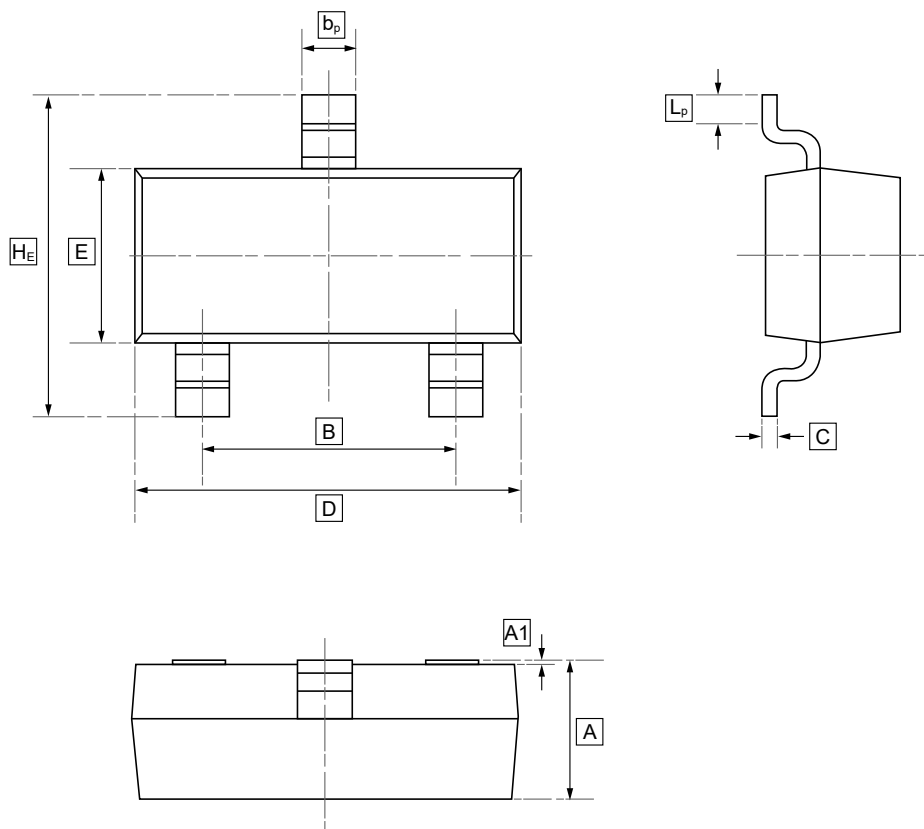


6. Typical characteristic





7.SOT-23 Package Outline Dimensions

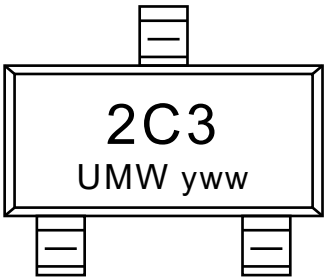


DIMENSIONS (mm are the original dimensions)

| Symbol | A | B | b_p | C | D | E | H_E | A1 | L_p |
|--------|------|------|-------|------|------|------|-------|-------|-------|
| Min | 0.95 | 1.78 | 0.35 | 0.08 | 2.70 | 1.20 | 2.20 | 0.013 | 0.20 |
| Max | 1.40 | 2.04 | 0.50 | 0.19 | 3.10 | 1.65 | 3.00 | 0.100 | 0.50 |



8.Ordering information



yww: Batch Code

| Order Code | Package | Base QTY | Delivery Mode |
|-----------------|---------|----------|---------------|
| UMW PDT5301-T73 | SOT-23 | 3000 | Tape and reel |



9.Disclaimer

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