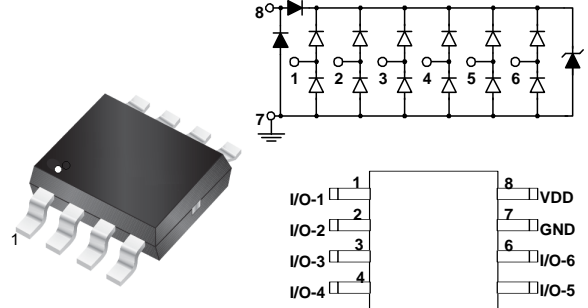


Ultra Low Capacitance ESD TVS Array in MSOP8

Features

- 100Watts peak pulse power ($T_p = 8/20\mu s$)
- MSOP8 Package
- Protects six Line Pairs
- Solid-state Punch through Avalanche TVS process technology
- Low clamping voltage
- Low leakage current
- Ultra Low capacitance
- Transient protection for high-speed data lines to :
IEC 61000-4-2 (ESD) $\pm 15kV$ (air), $\pm 8kV$ (contact)
IEC 61000-4-4 (EFT) 40A (5/50ns)
IEC 61000-4-5 (Lightning) 5A (8/20 μs)



Mechanical Data

- **Case:** MSOP8 (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

- HDMI Ports
- WAN/LAN Equipment
- Desktops, Servers, Notebooks & Handhelds
- 10/100/1000 Ethernet
- Base Stations

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

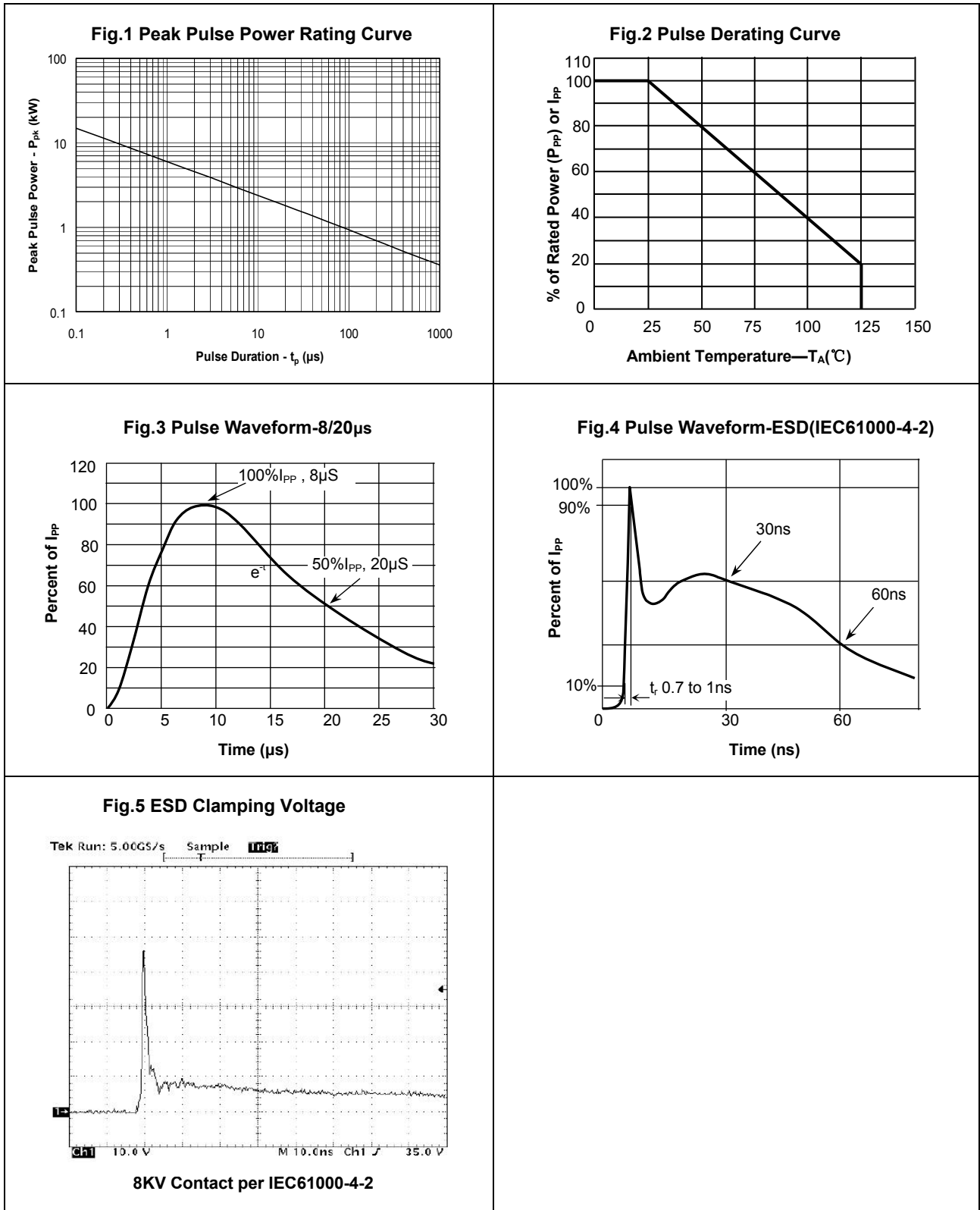
| Parameter | Symbol | Value | Unit |
|---|-----------|-------------|------|
| Peak Pulse Power ($T_p=8/20\mu s$) | P_{PP} | 100 | W |
| ESD contact/air discharge (IEC-61000-4-2) | V_{ESD} | 8/15 | kV |
| Peak Pulse Current ($T_p = 8/20\mu s$) | I_{PP} | 5 | A |
| Junction Temperature | T_J | -55 to +125 | °C |
| Storage temperature | T_{STG} | -55 to +150 | °C |

Electrical Characteristics

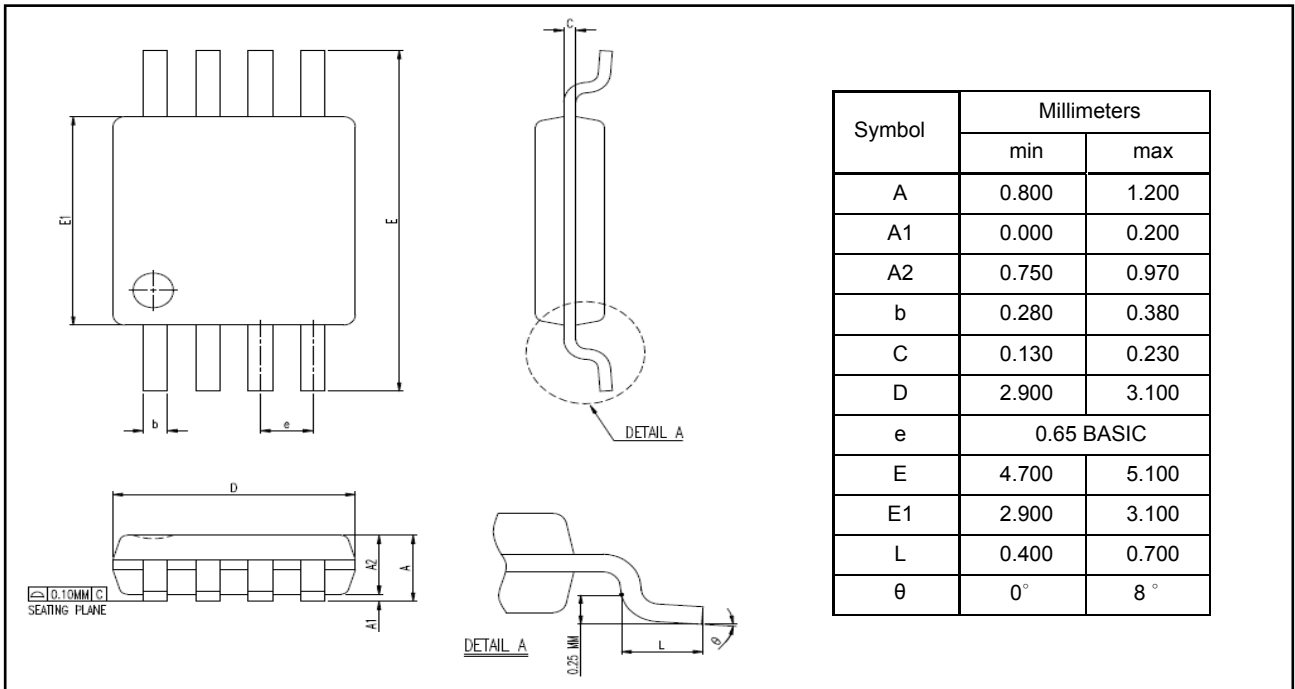
($T_A = 25\text{ °C}$ unless otherwise specified)

| Parameter | Symbol | Condition | Min | Typ | Max | Unit |
|---------------------------|-----------|----------------------------|-----|-----|-----|---------|
| Reverse stand-off Voltage | V_{RWM} | | | | 5.0 | V |
| Reverse Breakdown Voltage | V_{BR} | $I_T=1mA$ | 6.0 | | | V |
| Reverse Leakage Current | I_R | $V_R=5.0V$ | | | 0.5 | μA |
| Clamping Voltage | V_C | $I_{PP}=1A, T_p=8/20\mu s$ | | | 12 | V |
| Clamping Voltage | V_C | $I_{PP}=5A, T_p=8/20\mu s$ | | | 20 | V |
| Junction Capacitance | C_J | $V_R=0V, f=1MHz$ | | 0.3 | | pF |

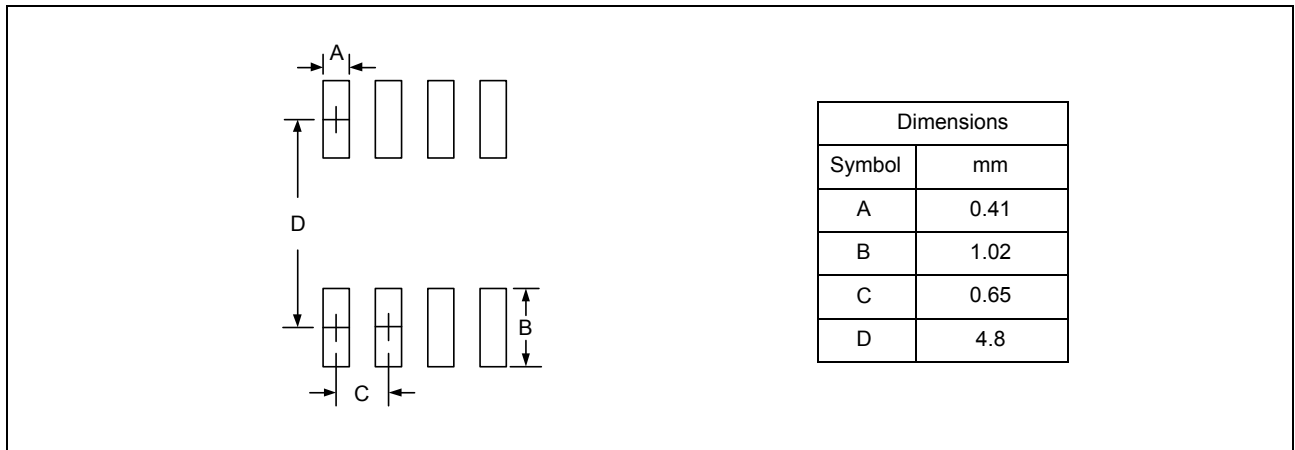
Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



Package Dimensions



Part number system



Ordering information

| Order code | Package | Packaging option | Base quantity | Packaging specification |
|-------------|---------|------------------|----------------|-------------------------|
| TESDM8UC5VU | MSOP8 | Tape and reel | 5000pcs / reel | EIA STD RS-481 |