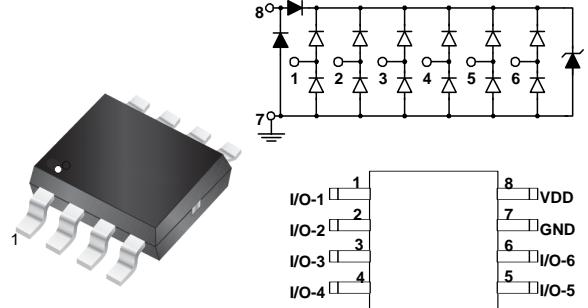


# Ultra Low Capacitance ESD TVS Array in MSOP8

## 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 $\mu s$ )



## 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

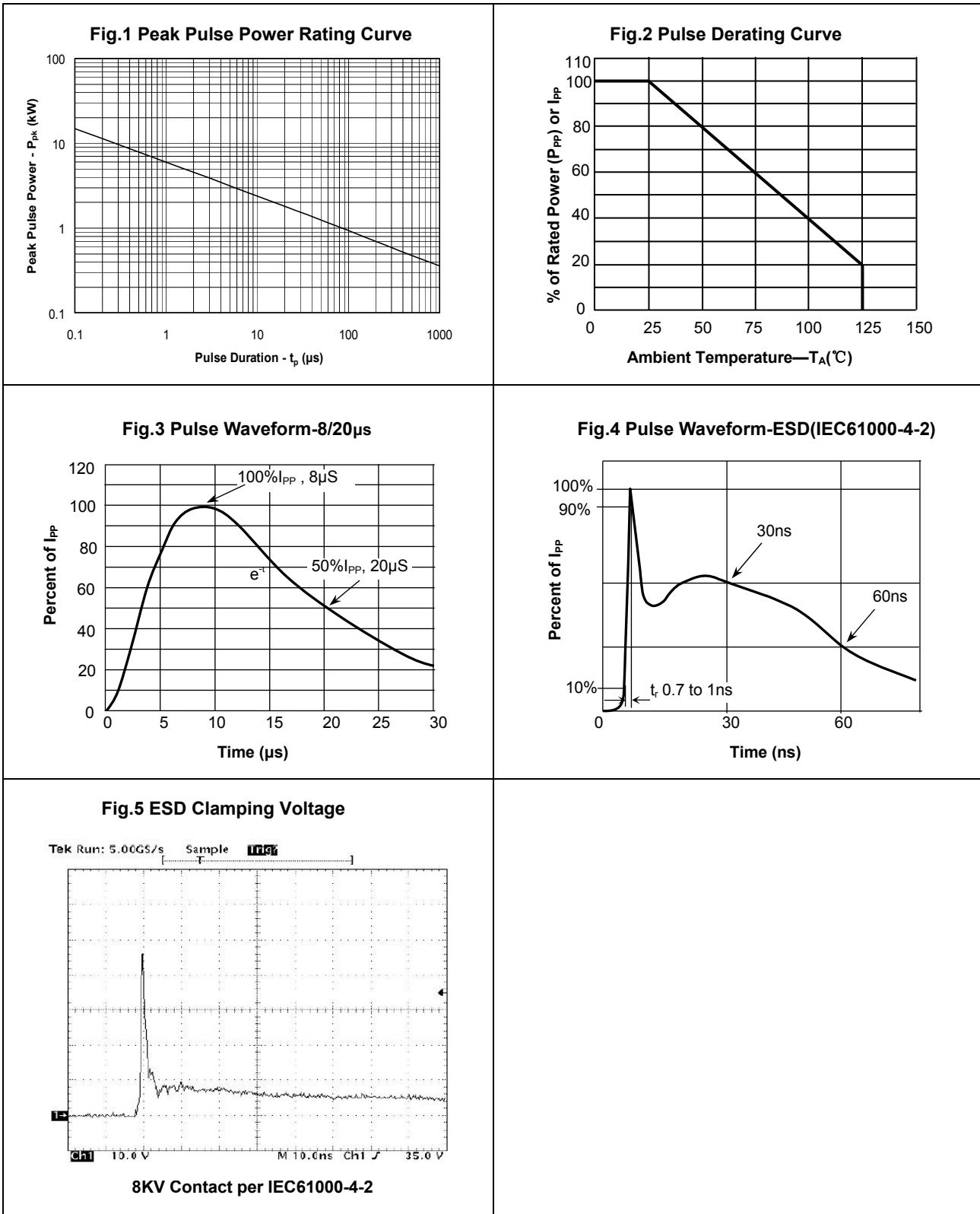
Parameter	Symbol	Value	Unit
Peak Pulse Power ( $T_P=8/20\mu s$ )	$P_{PP}$	100	W
ESD contact/air discharge (IEC-61000-4-2)	$V_{ESD}$	8/15	kV
Peak Pulse Current ( $T_P = 8/20\mu s$ )	$I_{PP}$	5	A
Junction Temperature	$T_J$	-55 to +125	°C
Storage temperature	$T_{STG}$	-55 to +150	°C

## Electrical Characteristics

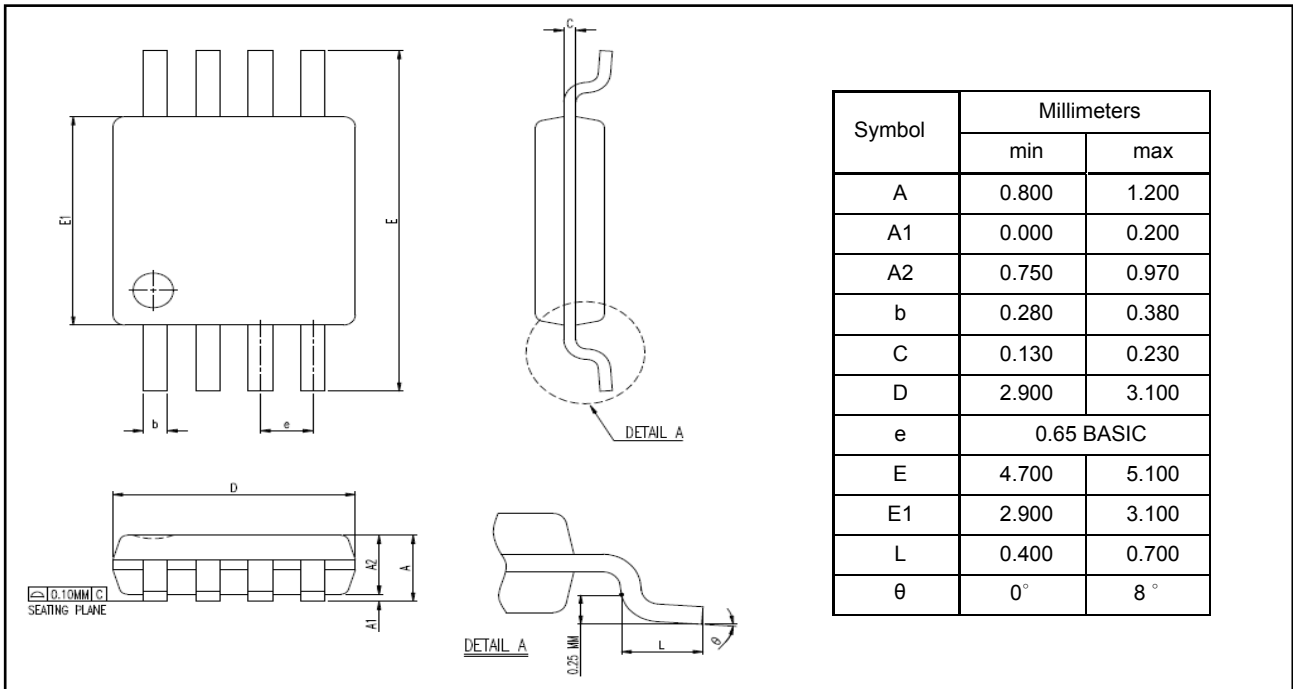
( $T_A = 25\text{ °C}$  unless otherwise specified)

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	$\mu A$
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

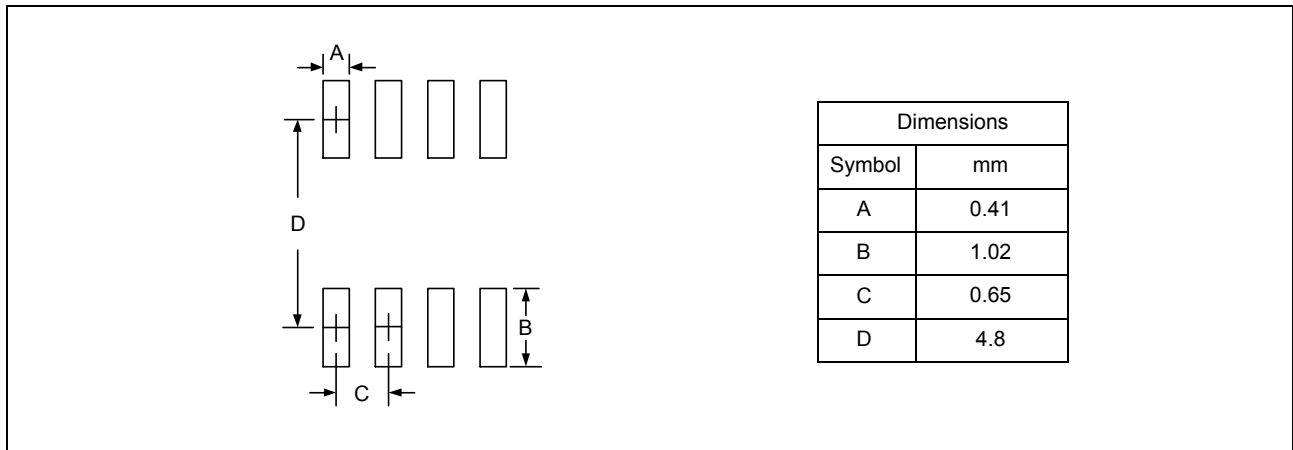
**Typical Characteristics** ( $T_{amb} = 25\text{ }^{\circ}\text{C}$  unless otherwise specified)



**Package Dimensions**



**Part number system**



**Ordering information**

Order code	Package	Packaging option	Base quantity	Packaging specification
CESDM8UC5VU	MSOP8	Tape and reel	5000pcs / reel	EIA STD RS-481

**Revision history**

Date	Revision	Changes
23-May-2020	1.0	Initial release

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