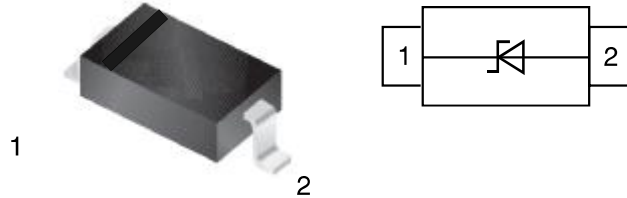




## CESD323HC4V5U

### Features

- 1800Watts peak pulse power ( $t_p = 8/20\mu s$ )
- SOD-323 package
- Unidirectional configurations
- Low clamping voltage
- Low leakage current
- High capacitance ( $C_j=560pF$  typ.)
- Protection one data/power line to:
  - IEC 61000-4-2  $\pm 30kV$  contact  $\pm 30kV$  air
  - IEC 61000-4-4 (EFT) 40A (5/50ns)
  - IEC 61000-4-5 (Lightning) 70A (8/20  $\mu s$ )



### Mechanical Data

- **Case:** SOD-323 (plastic package).  
Lead free; RoHS compliant
- **Molding Compound Flammability Rating:**  
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:  
260 °C/10 sec. at terminals

### Applications

- Computers and peripherals
- Communication systems
- Notebook
- Power Line
- Power management
- USB Vbus

### Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

| Parameter                                 | Symbol    | Value       | Unit |
|-------------------------------------------|-----------|-------------|------|
| Peak Pulse Power ( $T_p=8/20\mu s$ )      | $P_{PP}$  | 1800        | W    |
| ESD contact/air discharge (IEC-61000-4-2) | $V_{ESD}$ | 30/30       | kV   |
| Peak Pulse Current ( $t_p = 8/20\mu s$ )  | $I_{PP}$  | 70          | A    |
| Junction Temperature                      | $T_J$     | -55 to +125 | °C   |
| Storage temperature                       | $T_{STG}$ | -55 to +125 | °C   |

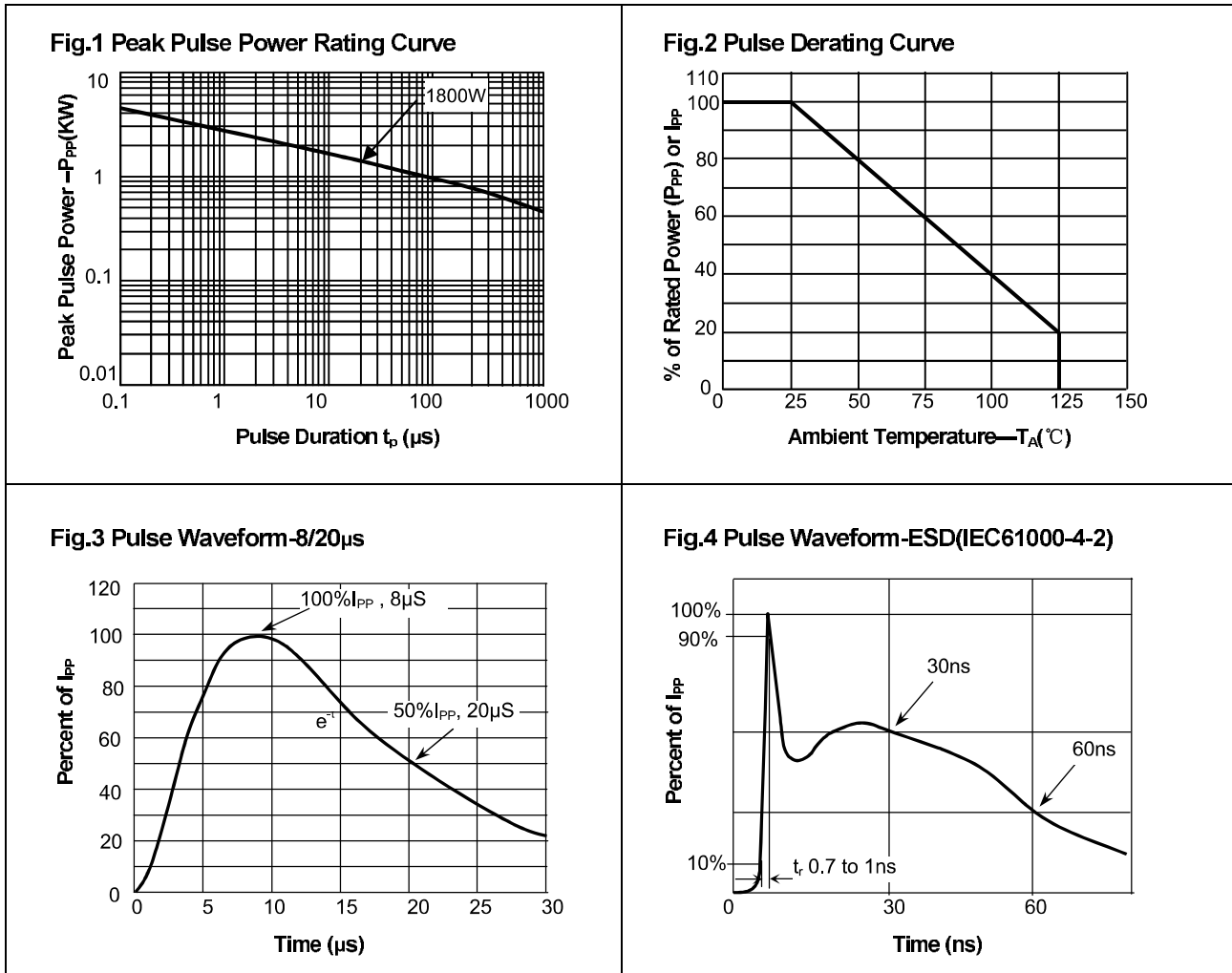
### Electrical Characteristics

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

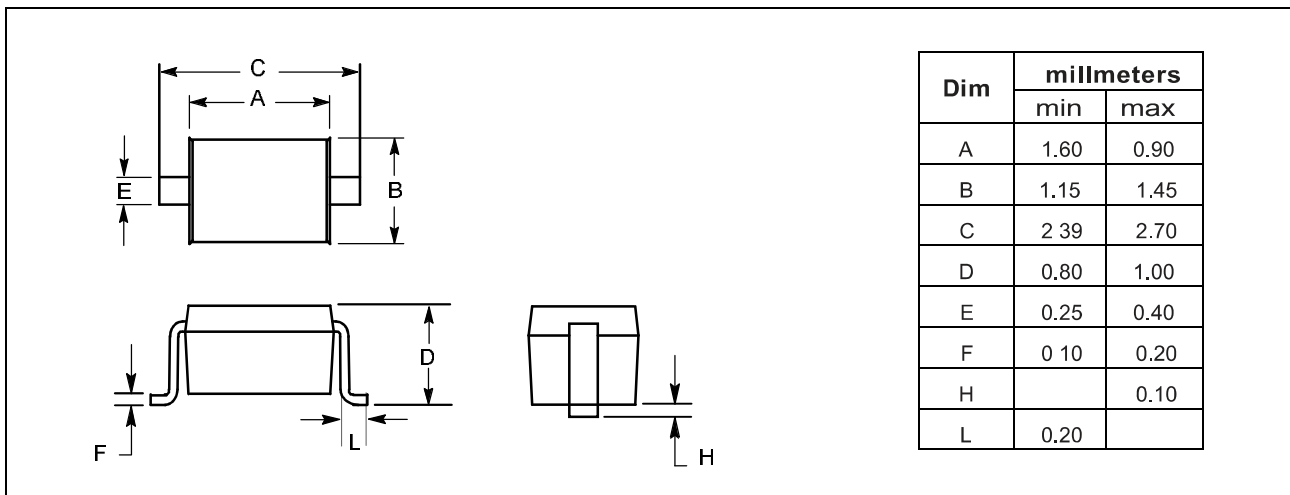
| Parameter                        | Symbol    | Condition        | Min | Typ | Max | Unit    |
|----------------------------------|-----------|------------------|-----|-----|-----|---------|
| Reverse stand-off Voltage        | $V_{RWM}$ |                  |     |     | 4.5 | V       |
| Reverse Breakdown Voltage        | $V_{BR}$  | $I_T=1mA$        | 5.0 | 6.2 | 6.5 | V       |
| Reverse Leakage Current          | $I_R$     | $V_R=4.5V$       |     |     | 1   | $\mu A$ |
| Clamping Voltage (IEC 61000-4-5) | $V_C$     | $I_{PP}=70A$     |     | 23  | 25  | V       |
| Junction Capacitance             | $C_J$     | $V_R=0V, f=1MHz$ |     | 560 | 620 | pF      |

# CESD323HC4V5U

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

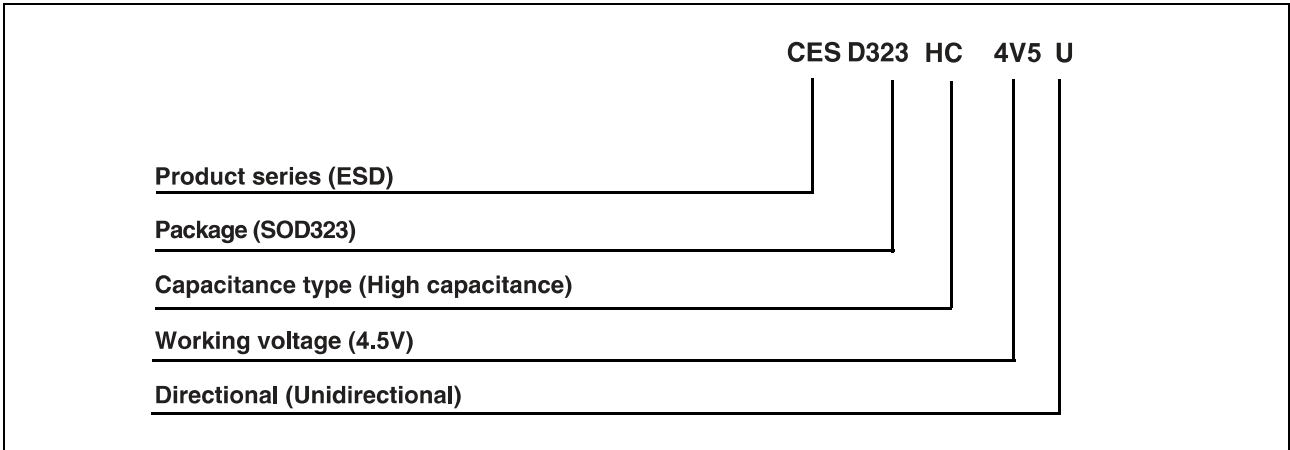


## Package Dimensions



# CESD323HC4V5U

## Part number system



## Marking



## Ordering information

| Order code    | Package | Packaging option | Base quantity  | Packaging specification |
|---------------|---------|------------------|----------------|-------------------------|
| CESD323HC4V5U | SOD-323 | Tape and reel    | 3000pcs / reel | EIA STD RS-481          |

## Revision history

| Date        | Revision | Changes         |
|-------------|----------|-----------------|
| 23-May-2012 | 1.0      | Initial release |