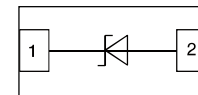
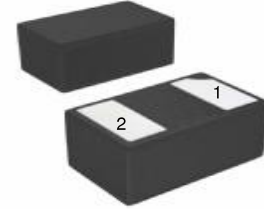




CESD1610HC5VU

Features

- 1800 Watts peak pulse power ($t_p = 8/20\mu s$)
- DFN1610 package
- Unidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Normal capacitance ($C_j=500pF$)
- 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) 90A (8/20 μs)



Mechanical Data

- **Case:** DFN1610 (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

- Charger Protection
- Parallel & Serial Port Protection
- Personal Digital Assistant (PDA)
- Microcontroller Input Protection
- Cellular Phones
- I²C Bus Protection

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}	90	A
Junction Temperature	T_J	-40 to +125	°C
Storage temperature	T_{STG}	-55 to +150	°C

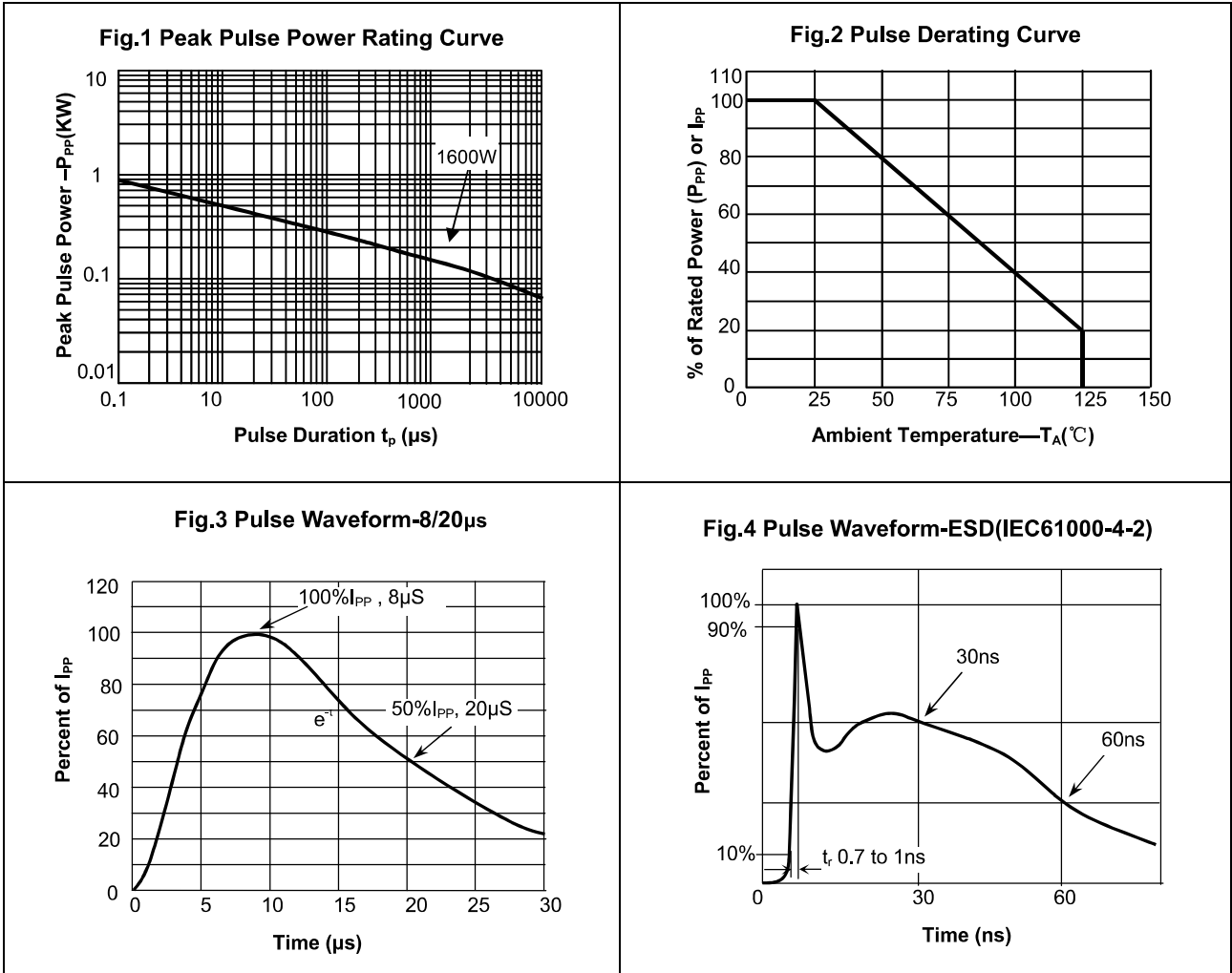
Electrical Characteristics

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

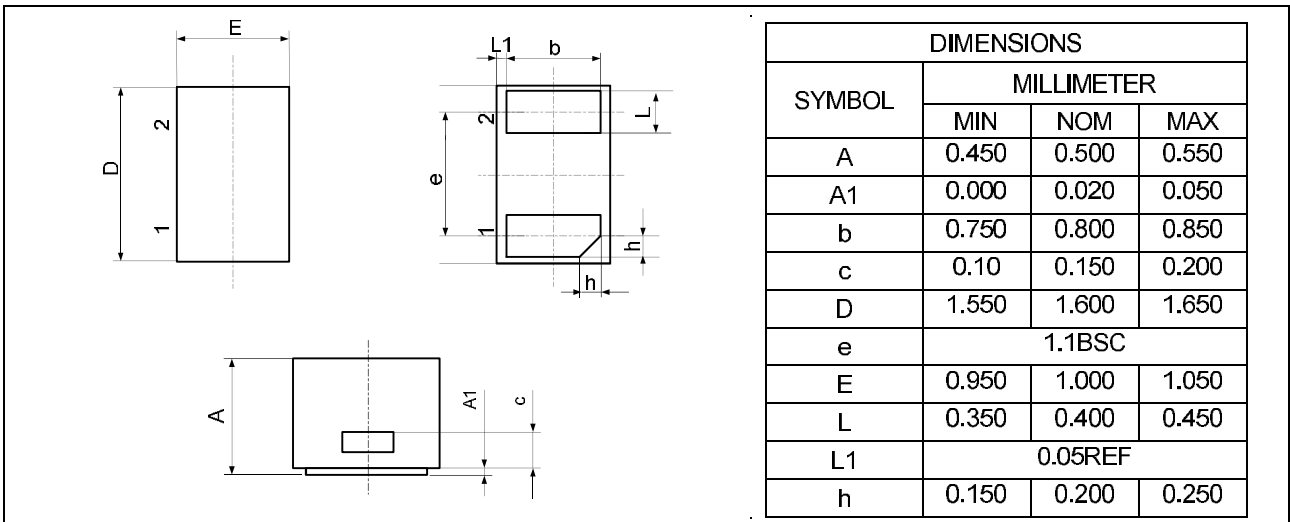
Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	6			V
Reverse Leakage Current	I_R	$V_R=5V$			5	μA
Clamping Voltage (IEC 61000-4-5)	V_C	$I_{PP}=1A$			6.9	V
Clamping Voltage (IEC 61000-4-5)	V_C	$I_{PP}=60A$		15.3	16.5	V
Clamping Voltage (IEC 61000-4-5)	V_C	$I_{PP}=90A$			20	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz$		500		pF

CESD1610HC5VU

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

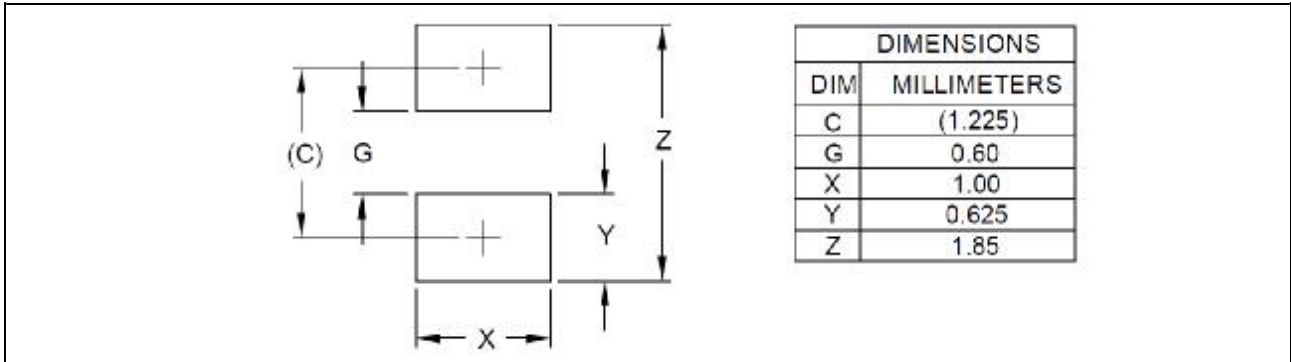


Package Dimensions

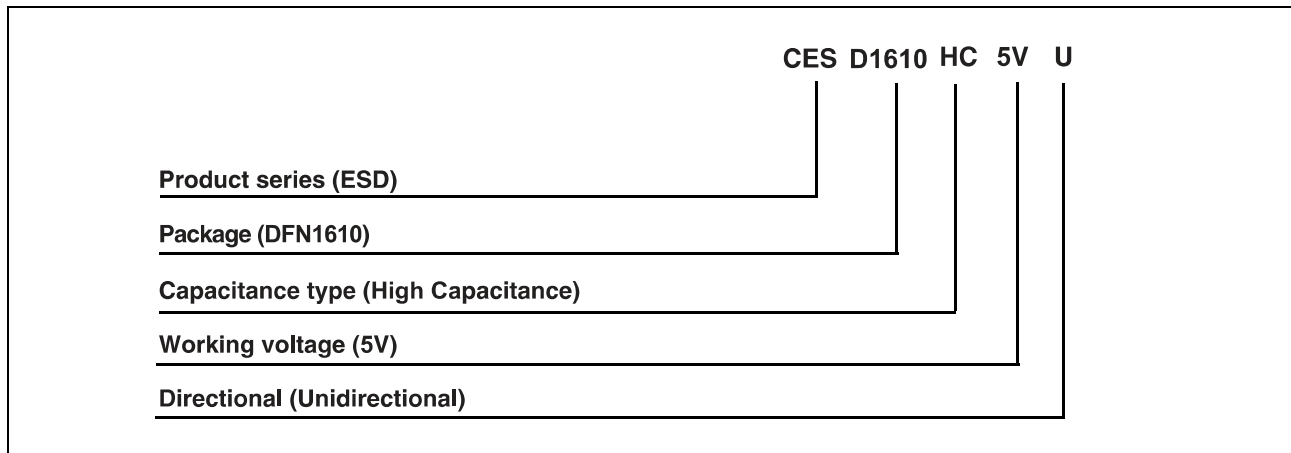


CESD1610HC5VU

Pad Dimensions



Part number system



Ordering information

Order code	Marking	Package	Packaging option	Base quantity	Weight	Packaging specification
CESD1610HC5VU	UT5	DFN1610	Tape and reel	3000pcs / reel	3.5mg	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2012	1.0	Initial release