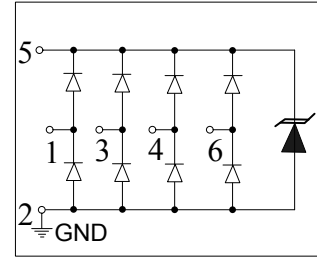
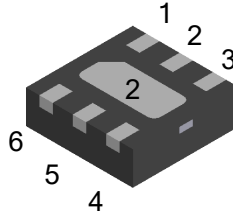


Low Capacitance ESD TVS Array in DFN1616-6L

Features

- 68Watts peak pulse power ($t_p = 8/20\mu s$)
- DFN1616-6L Package
- Unidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Low capacitance (0.4pF typical I/O to I/O)
- ESD Protection for high-speed data lines to:
 - IEC 61000-4-2 $\pm 15KV$ contact $\pm 15KV$ air
 - IEC 61000-4-4 (EFT) 40A (5/50ns)
 - IEC 61000-4-5 (Lightning) 4.5A (8/20 μs)



Mechanical Data

- **Case:** DFN1616-6L (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

- FireWire & USB
- Sensitive Analog Inputs
- Portable Electronics
- LAN/WAN equipment
- Microcontroller Input Protection

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

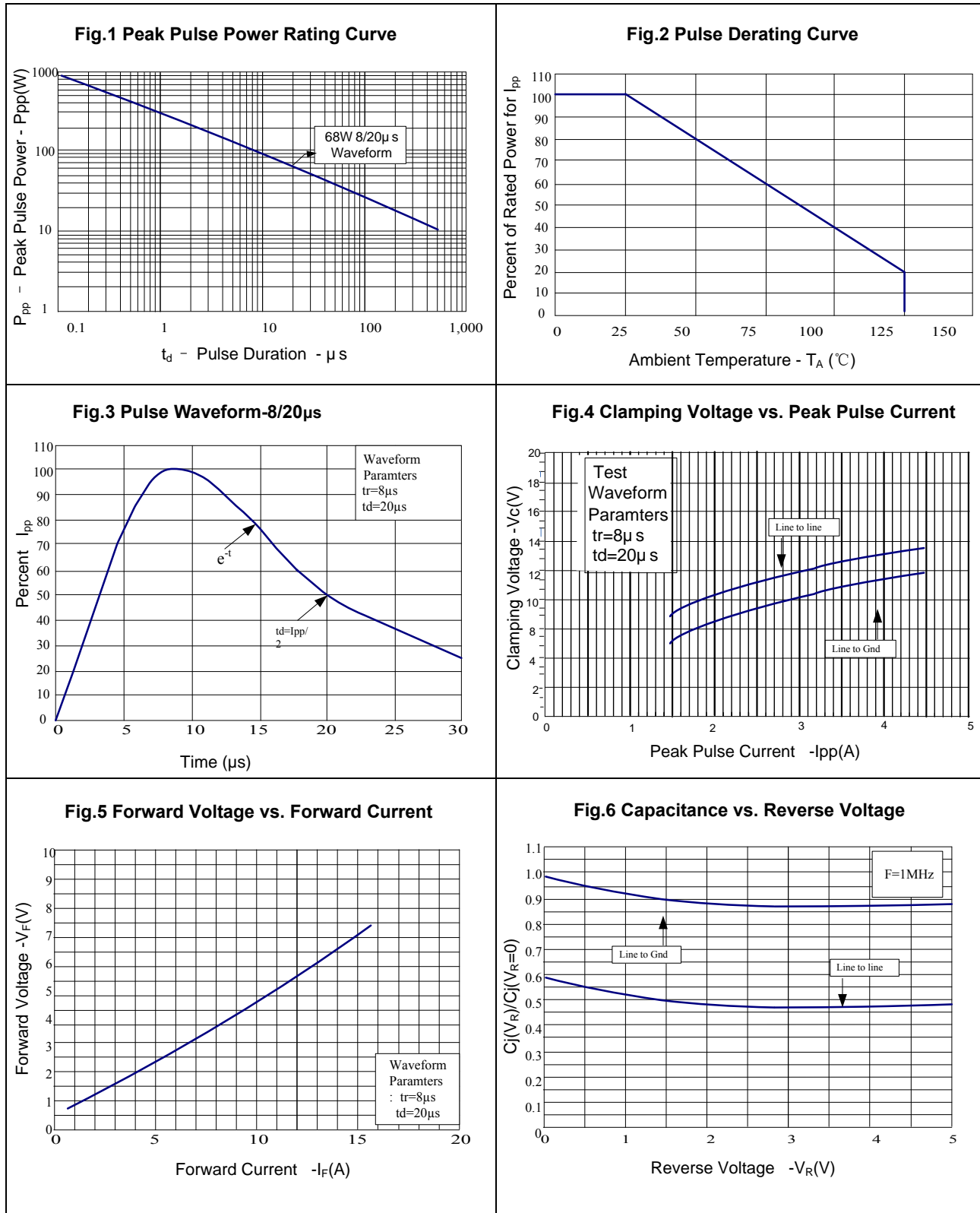
Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_P=8/20\mu s$)	P_{PP}	68	W
ESD contact/air discharge (IEC-61000-4-2)	V_{ESD}	15/15	kV
Peak Pulse Current ($t_P = 8/20\mu s$)	I_{PP}	4.5	A
Junction Temperature	T_J	-55 to +125	°C
Storage temperature	T_{STG}	-55 to +150	°C

Electrical Characteristics

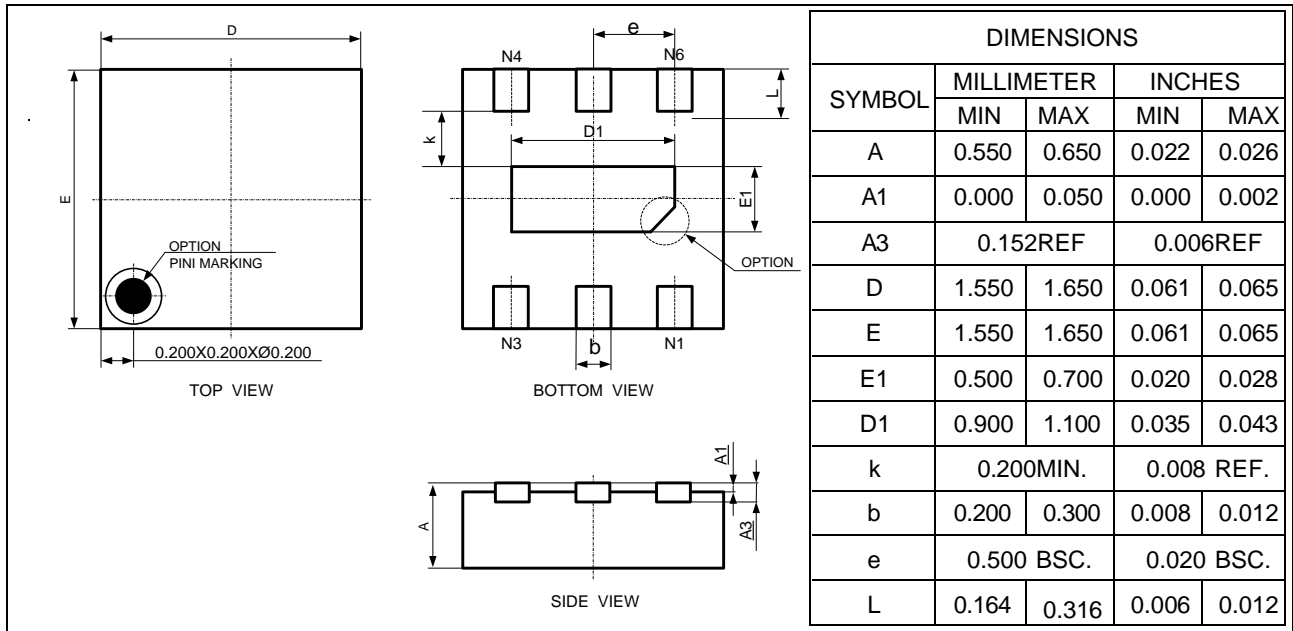
($T_A = 25$ °C unless otherwise specified)

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	$V_R=5V$			200	nA
Clamping Voltage(SURGE)	V_C	$I_{PP}=4.5A, T_P=8/20\mu s$		12	16	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz, I/O$ to I/O		0.4	0.6	pF
	C_J	$V_R=0V, f=1MHz, I/O$ to GND		0.8	1.0	pF

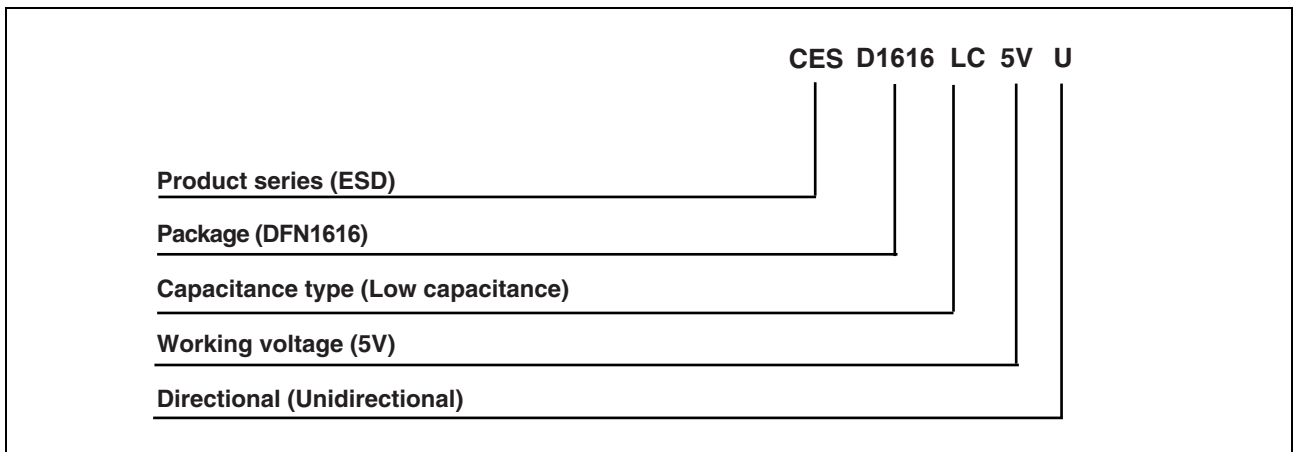
Typical Characteristics ($T_{amb} = 25^{\circ}\text{C}$ unless otherwise specified)



Package Dimensions



Part number system



Ordering information

Order code	Marking	Package	Packaging option	Base quantity	Packaging specification
CESD1616LC5VU	54R	DFN1616-6L	Tape and reel	3000pcs / reel	EIA STD RS-481

Revision history

Date	Revision	Changes
18-Dec.-2016	1.0	Initial release

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