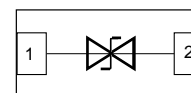
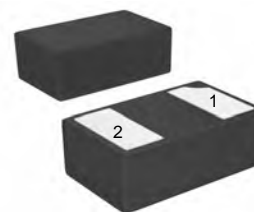


### Features

- 450 Watts peak pulse power ( $T_p = 8/20\mu s$ )
- DFN1610-2 package
- Bidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Normal capacitance ( $C_j = 105\text{pF}$ )
- Protection one data/power line to:
  - IEC 61000-4-2  $\pm 30\text{kV}$  contact  $\pm 30\text{kV}$  air
  - IEC 61000-4-4 (EFT) 40A (5/50ns)
  - IEC 61000-4-5 (Lightning) 45A (8/20  $\mu s$ )



### Mechanical Data

- **Case:** DFN1610-2 (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

- Charger Protection
- Parallel & Serial Port Protection
- Personal Digital Assistant (PDA)
- Microcontroller Input Protection
- Cellular Phones
- I<sup>2</sup>C Bus Protection

### Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	Symbol	Value	Unit
Peak Pulse Power ( $T_p = 8/20\mu s$ )	$P_{PP}$	450	W
ESD contact/air discharge (IEC-61000-4-2)	$V_{ESD}$	30/30	kV
Peak Pulse Current ( $t_p = 8/20\mu s$ )	$I_{PP}$	45	A
Junction Temperature	$T_J$	-55 to +125	°C
Storage temperature	$T_{STG}$	-55 to +150	°C

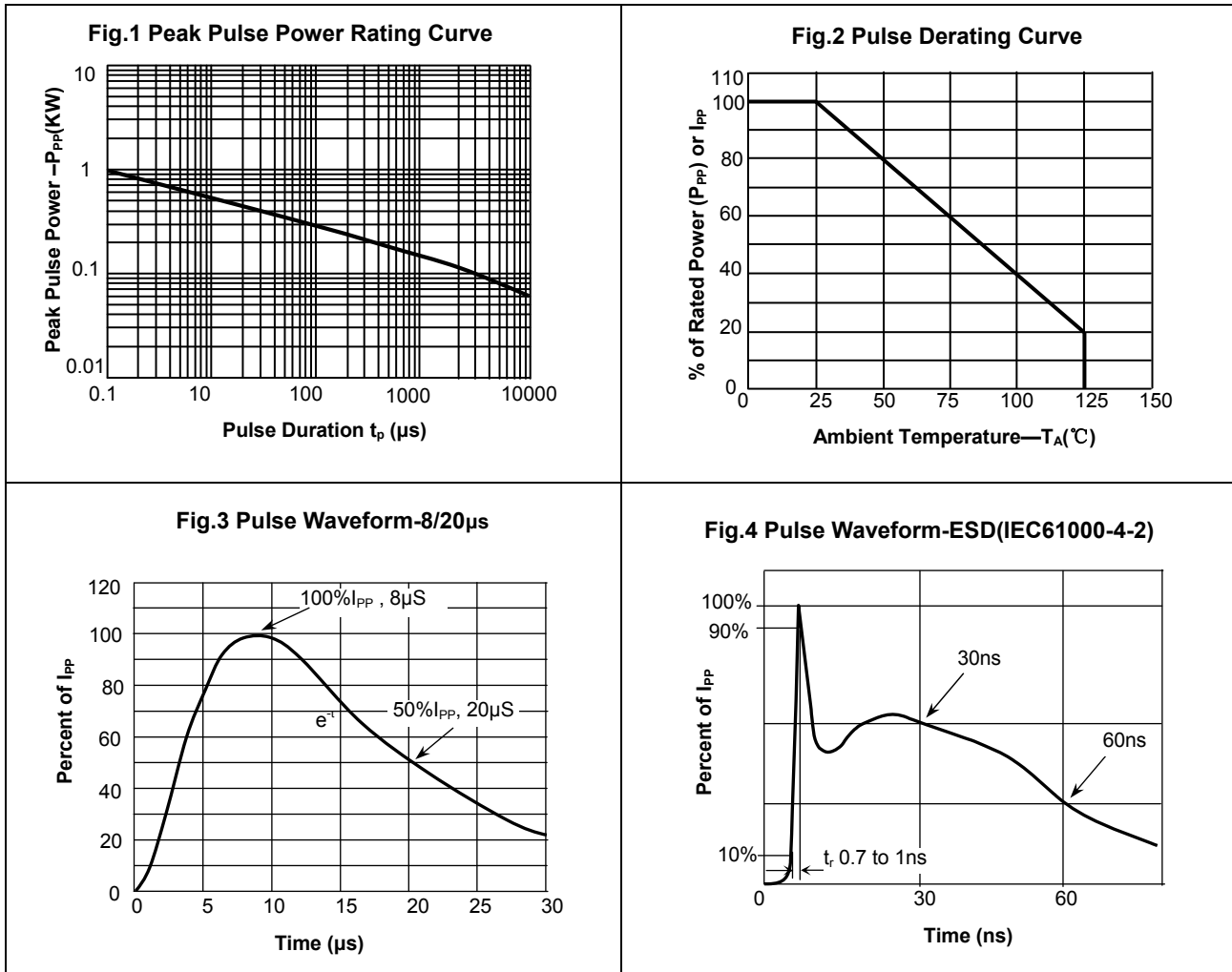
### Electrical Characteristics

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

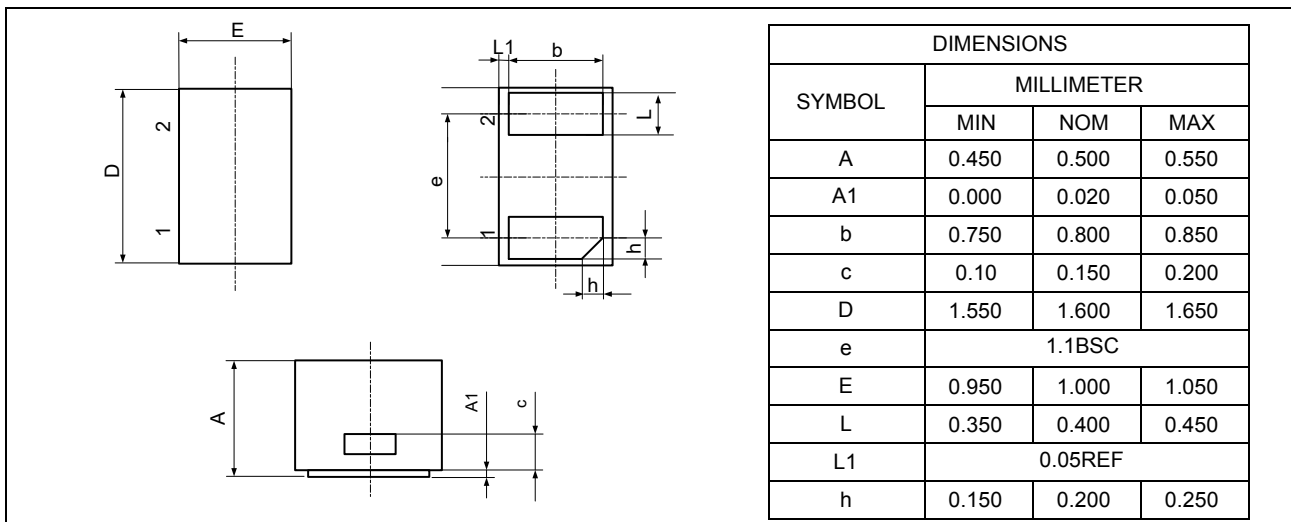
Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	$V_{RWM}$				5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T = 1\text{mA}$	6.0	7.5		V
Reverse Leakage Current	$I_R$	$V_R = 5\text{V}$			1	$\mu\text{A}$
Clamping Voltage (IEC 61000-4-5)	$V_C$	$I_{PP} = 45\text{A}$		10		V
Junction Capacitance	$C_J$	$V_R = 0\text{V}$ , $f = 1\text{MHz}$		105		pF



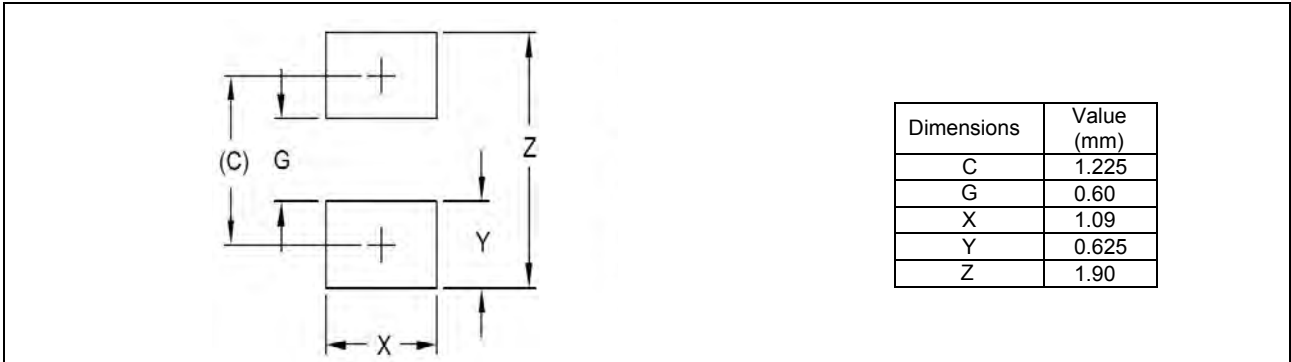
**Typical Characteristics** ( $T_{amb} = 25\text{ }^{\circ}\text{C}$  unless otherwise specified)



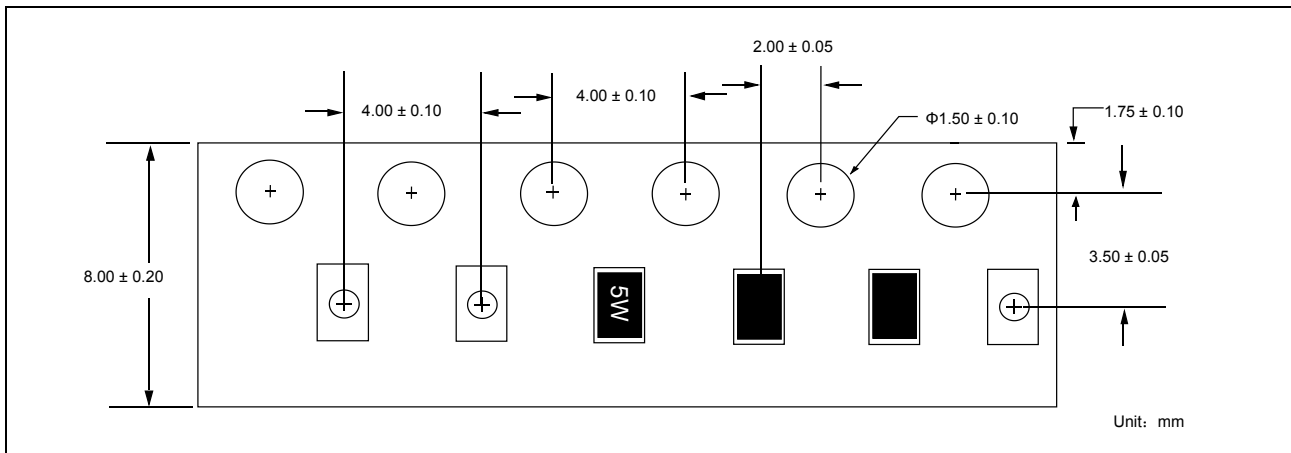
**Package Dimensions**



**Pad Dimensions**



**Package Information**



**Marking**



**Ordering information**

Order code	Package	Packaging option	Base quantity	Weight	Packaging specification
YED16C20545AG	DFN1610-2	Tape and reel	10000pcs / reel	3.5mg	EIA STD RS-481