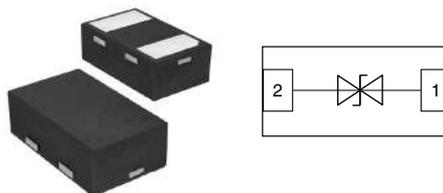


### Features

- 100Watts peak pulse power ( $t_p = 8/20 \mu s$ )
- DFN1006-2 Package
- Bidirectional configurations
- R2R + Zener technology
- Low clamping voltage
- Low leakage current
- Ultra low capacitance ( $C_j=0.3pF$  typ.)
- Protection one data/power line to:
  - IEC 61000-4-2  $\pm 20kV$  contact  $\pm 20kV$  air
  - IEC 61000-4-4 (EFT) 40A (5/50ns)
  - IEC 61000-4-5 (Lightning) 5A (8/20 $\mu s$ )



### Mechanical Data

- **Case:** DFN1006-2 (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

- USB3.0, Firewire, DVI, HDMI, S-ATA
- Thunderbolt, Display Port
- Mobile HDMI Link, MDDI, MIPI, SWP / NFC

### Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

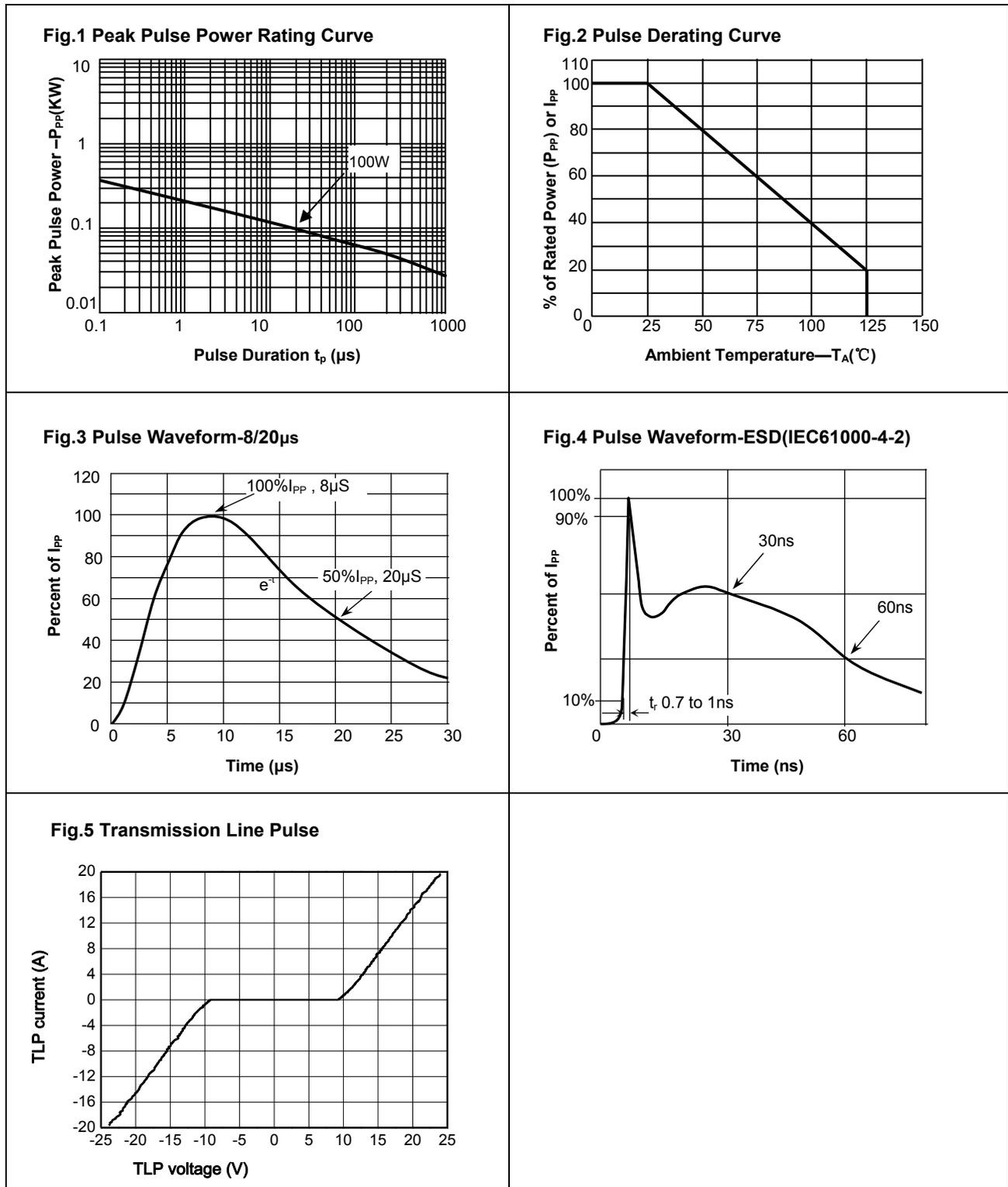
| Parameter                                 | Symbol    | Value       | Unit |
|---|-----------|-------------|------|
| Peak Pulse Power ( $T_P=8/20\mu S$ )      | $P_{PP}$  | 100         | W    |
| ESD contact/air discharge (IEC-61000-4-2) | $V_{ESD}$ | 20          | kV   |
| Peak Pulse Current ( $t_P = 8/20\mu S$ )  | $I_{PP}$  | 5.0         | A    |
| Junction Temperature                      | $T_J$     | -55 to +125 | °C   |
| Storage temperature                       | $T_{STG}$ | -55 to +150 | °C   |

### Electrical Characteristics

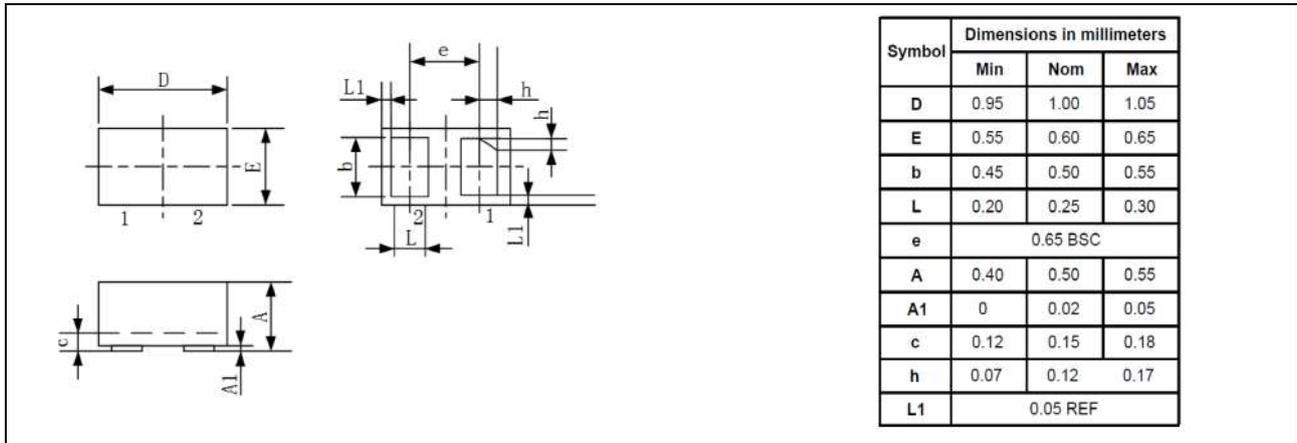
( $T_A = 25 \text{ °C}$  unless otherwise specified)

| Parameter                        | Symbol    | Condition               | Min | Typ | Max  | Unit     |
|----------------------------------|-----------|-------------------------|-----|-----|------|----------|
| Reverse stand-off Voltage        | $V_{RWM}$ |                         |     |     | 5.0  | V        |
| Reverse Breakdown Voltage        | $V_{BR}$  | $I_T=1mA$               | 6.5 | 8.5 |      | V        |
| Reverse Leakage Current          | $I_R$     | $V_R=5.0V$              |     |     | 100  | nA       |
| Clamping Voltage (IEC 61000-4-5) | $V_C$     | $I_{PP}=1A$             |     |     | 15   | V        |
|                                  |           | $I_{PP}=5A$             |     | 27  |      | V        |
| Clamping Voltage (IEC 61000-4-2) | $V_C$     | $V_{ESD}=8kV$           |     | 20  |      | V        |
| Clamping Voltage (TLP)           | $V_C$     | $I_{PP}=16A, T_P=100ns$ |     | 21  |      | V        |
| Dynamic resistance               | $R_{dyn}$ |                         |     | 0.7 |      | $\Omega$ |
| Junction Capacitance             | $C_J$     | $V_R=0V, f=1MHz$        |     | 0.3 | 0.35 | pF       |

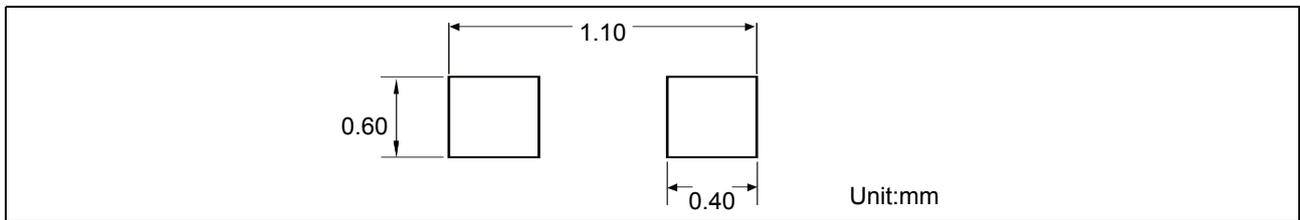
**Typical Characteristics** ( $T_{amb} = 25\text{ }^{\circ}\text{C}$  unless otherwise specified)



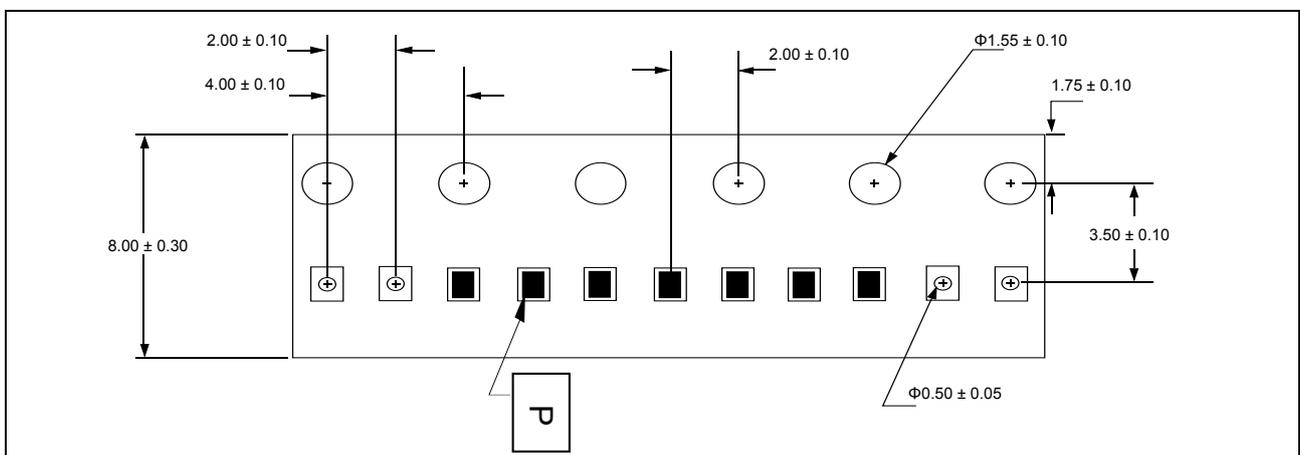
**Package Dimensions**



**Pad Dimensions**



**Tape and Reel Specification**



**Ordering information**

| Order code    | Marking | Package   | Packaging option | Base quantity    | Packaging specification |
|---------------|---------|-----------|------------------|------------------|-------------------------|
| YEUD1020505AG | P       | DFN1006-2 | Tape and reel    | 10,000pcs / reel | EIA STD RS-481          |