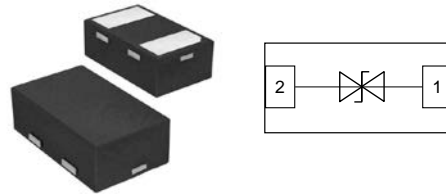


### Features

- 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:
  - ISO 10605  $\pm 15kV$  contact  $\pm 25kV$  air
  - IEC 61000-4-4 (EFT) 40A (5/50ns)
  - IEC 61000-4-5 (Lightning) 5A (8/20 $\mu s$ )
- AEC-Q101 Qualified



### 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 (ISO10605)	$V_{ESD}$	15/25	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)

Fig.1 Peak Pulse Power Rating Curve

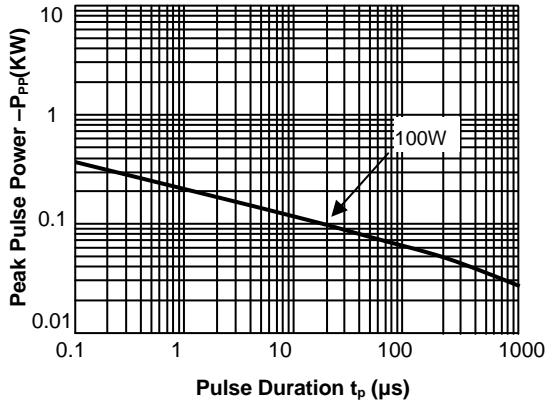


Fig.2 Pulse Derating Curve

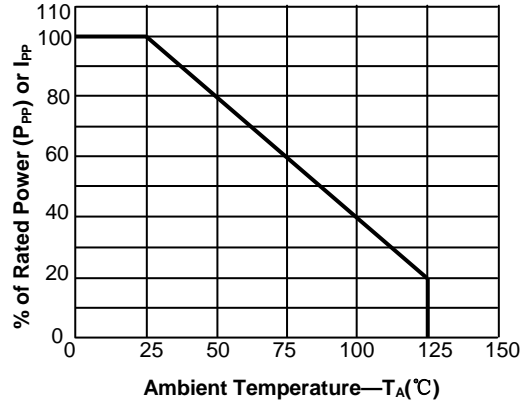


Fig.3 Pulse Waveform-8/20 $\mu\text{s}$

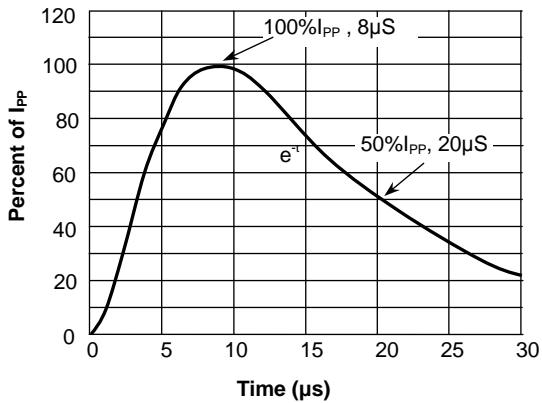


Fig.4 Pulse Waveform-ESD(IEC61000-4-2)

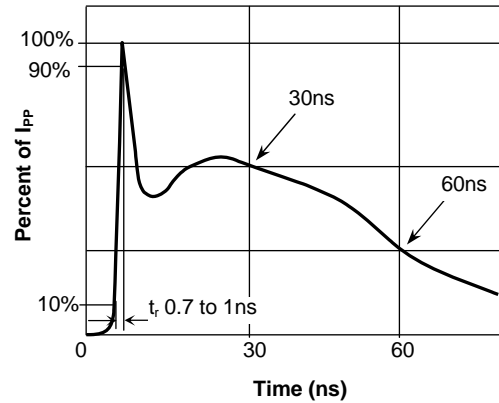
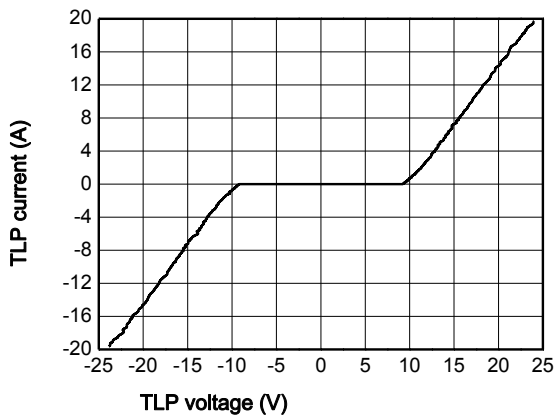
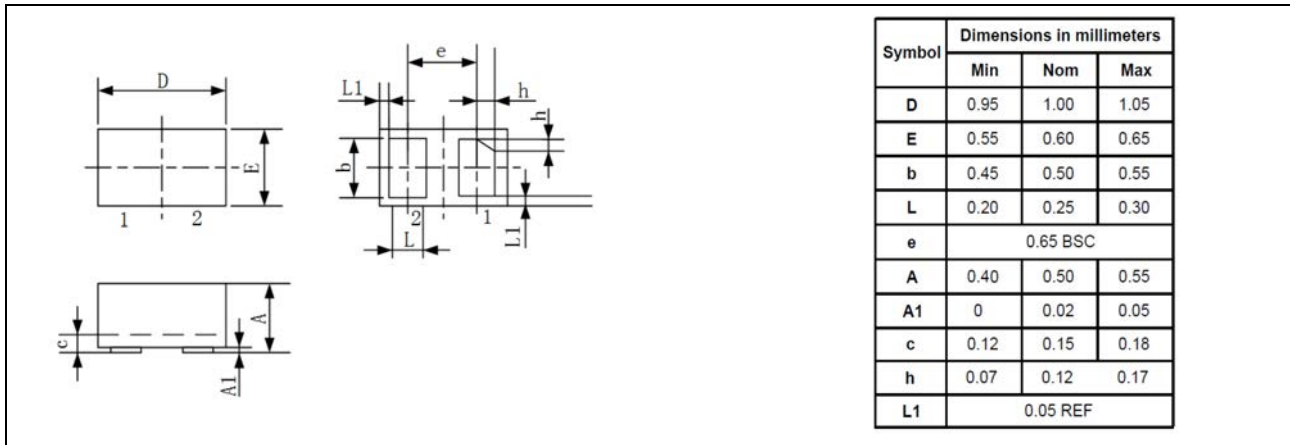


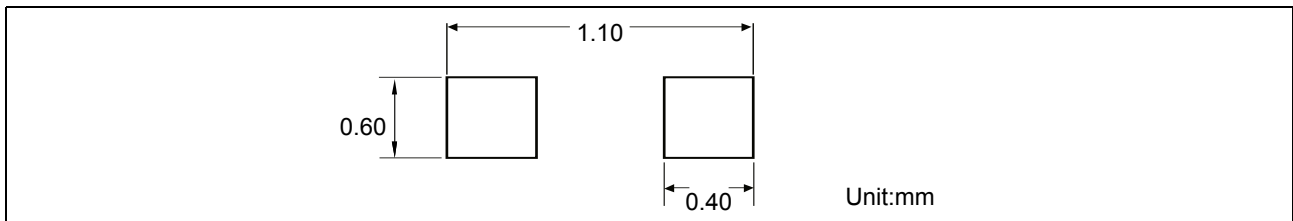
Fig.5 Transmission Line Pulse



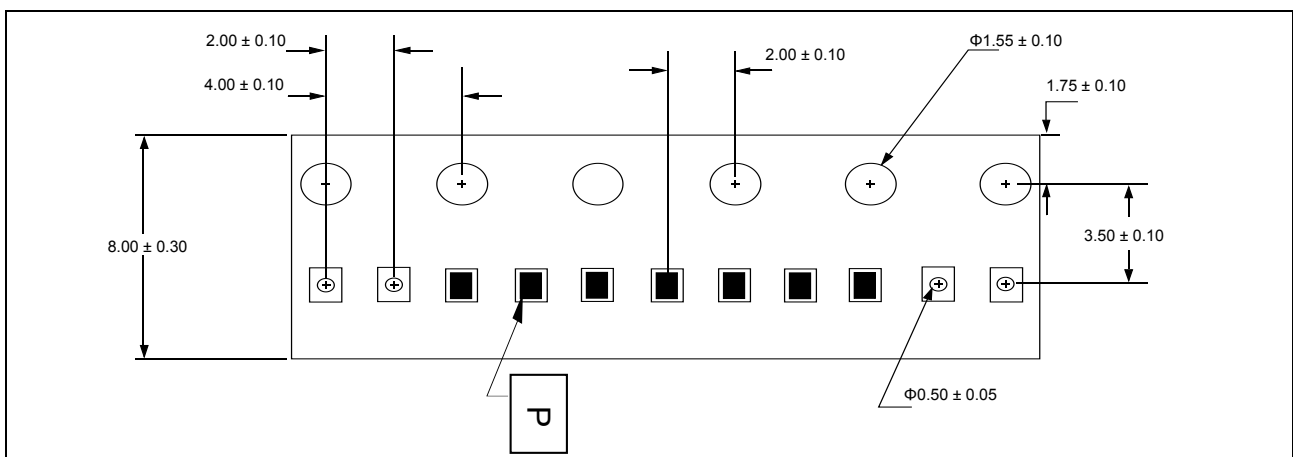
### Package Dimensions



### Pad Dimensions



### Tape and Reel Specification



### Ordering information

Order code	Marking	Package	Packaging option	Base quantity	Packaging specification
YEUD1020505AH	P	DFN1006-2	Tape and reel	10,000pcs / reel	EIA STD RS-481