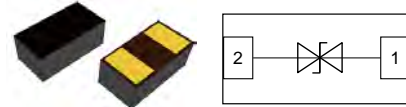


Features

- Very low leakage current
- Fast response time
- Bidirectional configurations
- Very low leakage current
- Response time is typically <math><1\text{ns}</math>
- Extremely low capacitance ($C_j=0.05\text{pF typ.}</math>)$
- The best ESD protection for high frequency, low voltage applications
- Protection one data line to:
IEC 61000-4-2 $\pm 30\text{kV}$ contact $\pm 30\text{kV}$ air



Mechanical Data

- **Case:** P0201 (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



Caution:
This component is designed for signal line protection only,
Not intended to be used under bias, not for application with
a power line.

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	Symbol	Value	Unit
Maximum Contact discharge voltage Per IEC61000-4-2	V_{ESD}	30	kV
Maximum Air discharge voltage Per IEC61000-4-2	V_{ESD}	30	kV
Operating temperature	T_{Oper}	-40 to +125	°C
Storage temperature	T_{STG}	-55 to +125	°C
Maximum Lead Solder Temperature(10 second duration)	T_L	260	°C

Electrical Characteristics

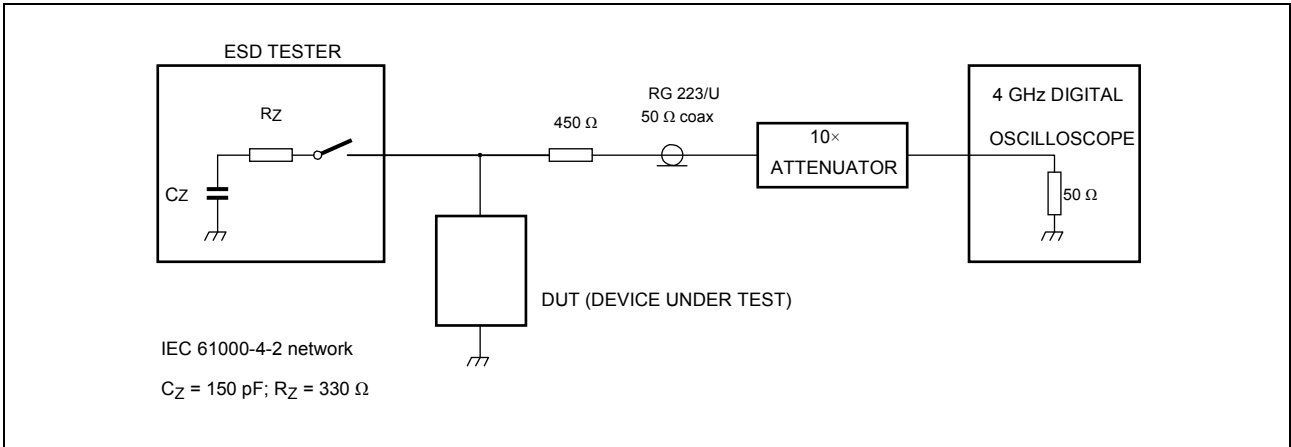
($T_A = 25\text{ °C}$ unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Rated Voltage	V_R	---			10	V
Trigger voltage	V_T	IEC61000-4-2 8KV contact discharge		350		V
Leakage current	I_L	DC 12V shall be applied on component			0.1	μA
Clamping Voltage	V_C	IEC61000-4-2 8KV contact discharge		35		V
Junction Capacitance	C_J	$V_R=0\text{V}, f=1\text{MHz}$		0.05		pF

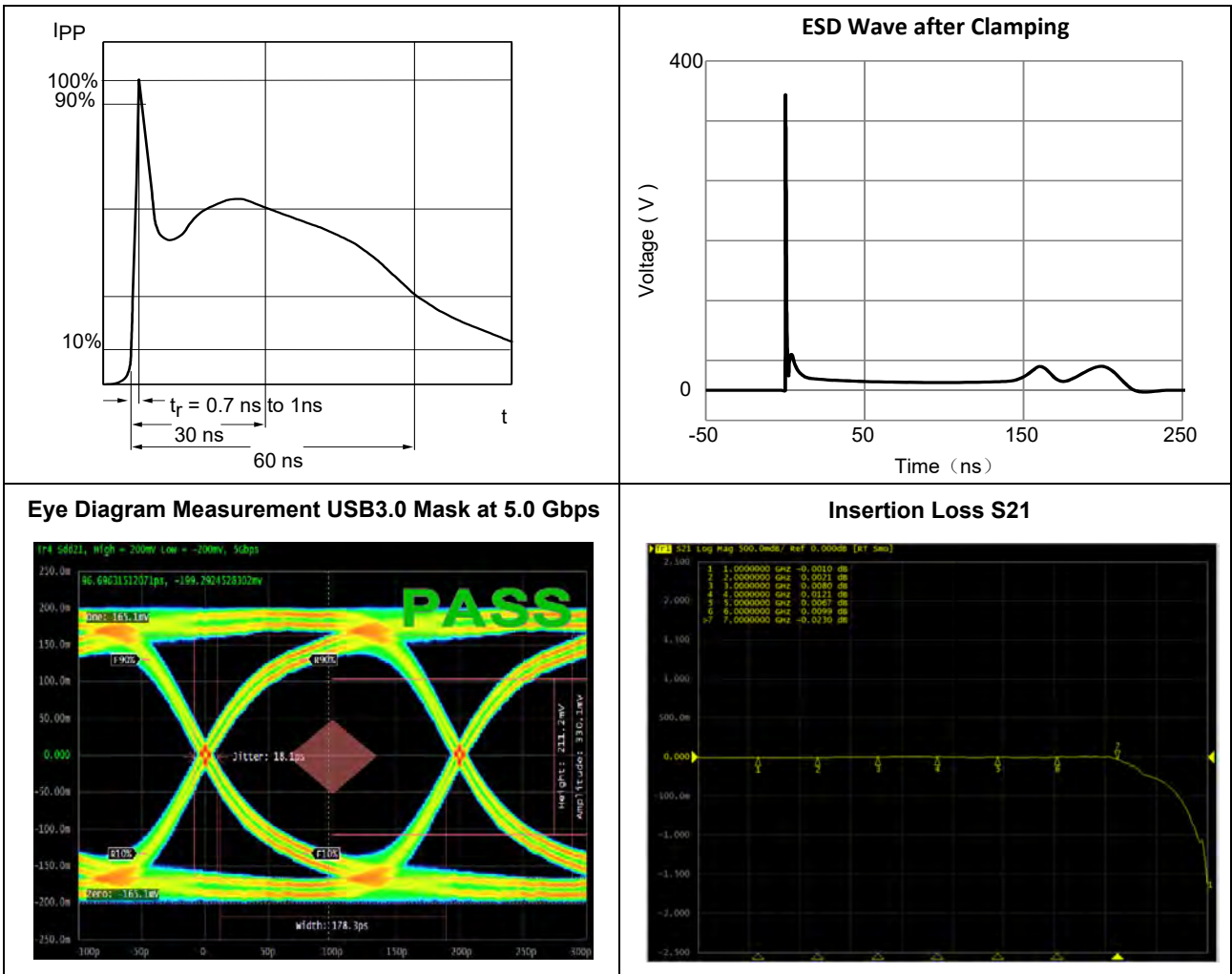
Note: 1. Trigger and clamping voltage are measured per IEC 61000-4-2, 8KV contact discharge method.

2. After reliability tests such as high temp storage, temp cycles, continuous ESD strike etc, the maximum leakage current is less than 10 μA .

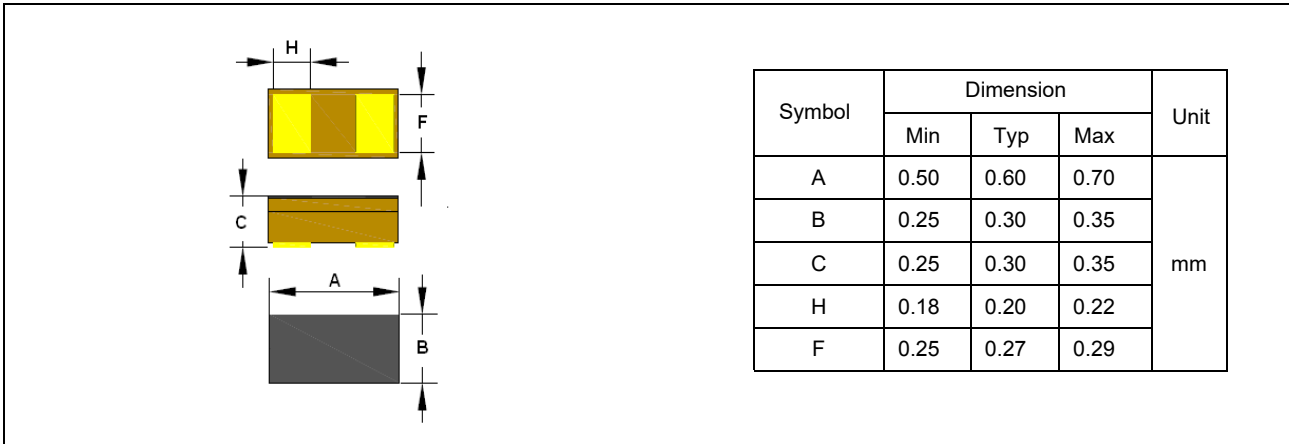
ESD Clamping Test



ESD Clamping Test Waveforms



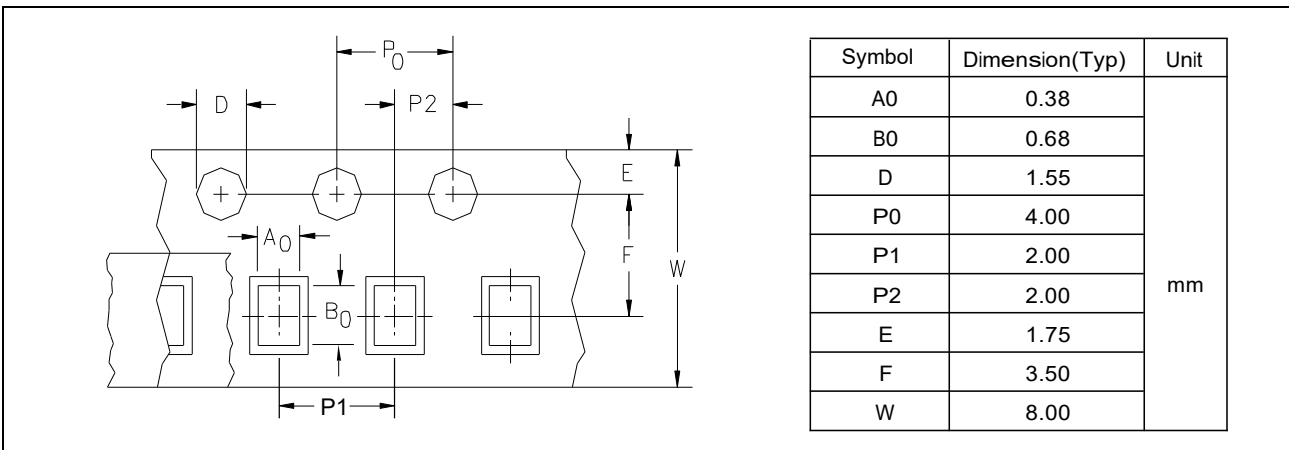
Product Dimension



Pad Dimensions



Package Information



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
YEUP02210R05B	P0201	Tape and reel	15000pcs / reel	EIA STD RS-481