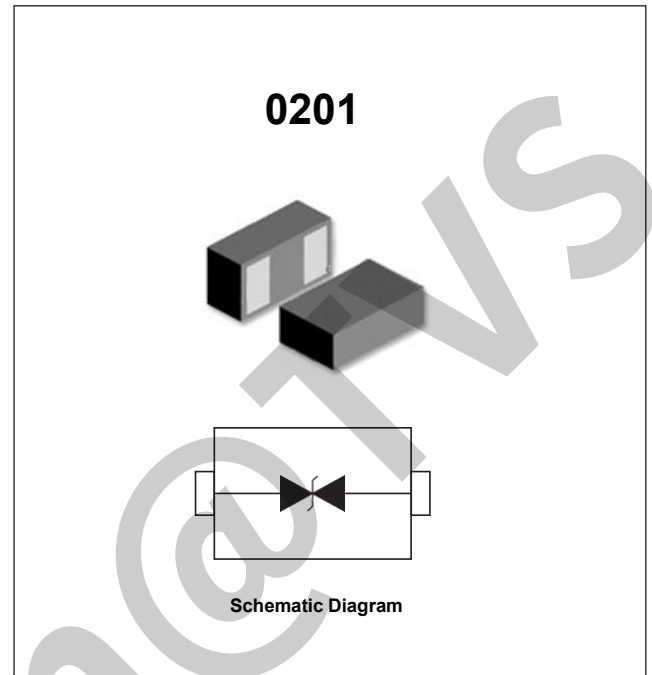


Features

- ESD protection for high speed data lines to IEC61000-4-2
- ESD contact discharge typical 8KV, max 15KV
- ESD air discharge typical 15KV, max 25KV
- Surface mount
- Extremely low capacitance
- Very low leakage current
- Fast response time
- Bi-directional ESD protection
- Lead free solder termination
- The best ESD protection for high frequency, low voltage applications

Mechanical Data

- Package: 0201
- Net Weight: 0.44 mg
- Carrier: Tape & Reel, 15,000 pcs/reel
- Lead-free, RoHS compliant



Applications

- HDMI, DVI, Display Port, UDI, MDDI
- Gigabit Ethernet
- USB 2.0 and USB 3.0
- IEEE 1394 Interface

Ordering information

Order code	Marking	Package	Packaging option	Base quantity	Packaging specification
DCESD0201P03	-	0201	Tape and reel	10000pcs / reel	EIA STD RS-481

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

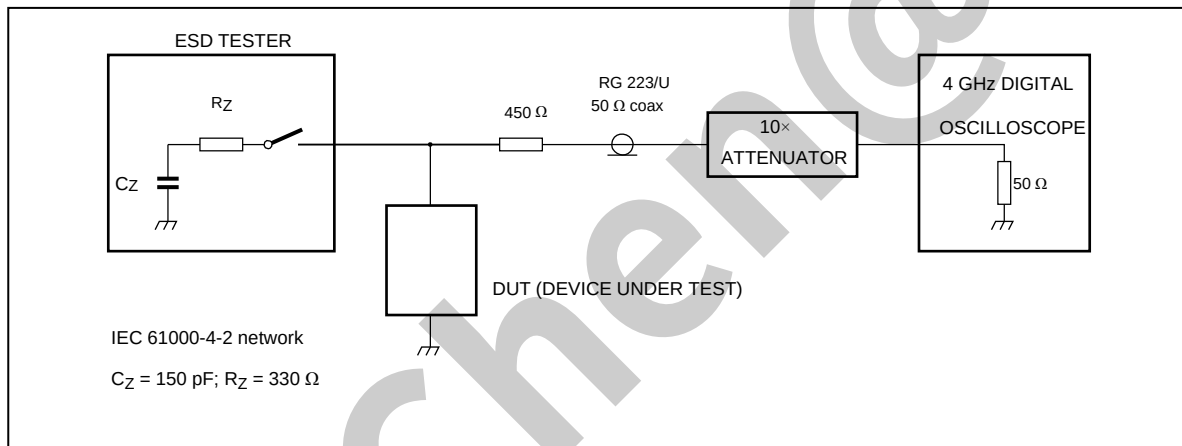
Parameter	Symbol	Value	Unit
Rated Voltage	VR	3.3	V
ESD contact/air discharge (IEC-61000-4-2)	V _{ESD}	15/25	kV
Junction Temperature	T _J	-55 to +125	°C
Operation temperature	T _{OP}	-55 to +125	°C
Lead temperature	T _L	260	°C
Storage temperature	T _{STG}	-55 to +150	°C

Electrical Characteristics

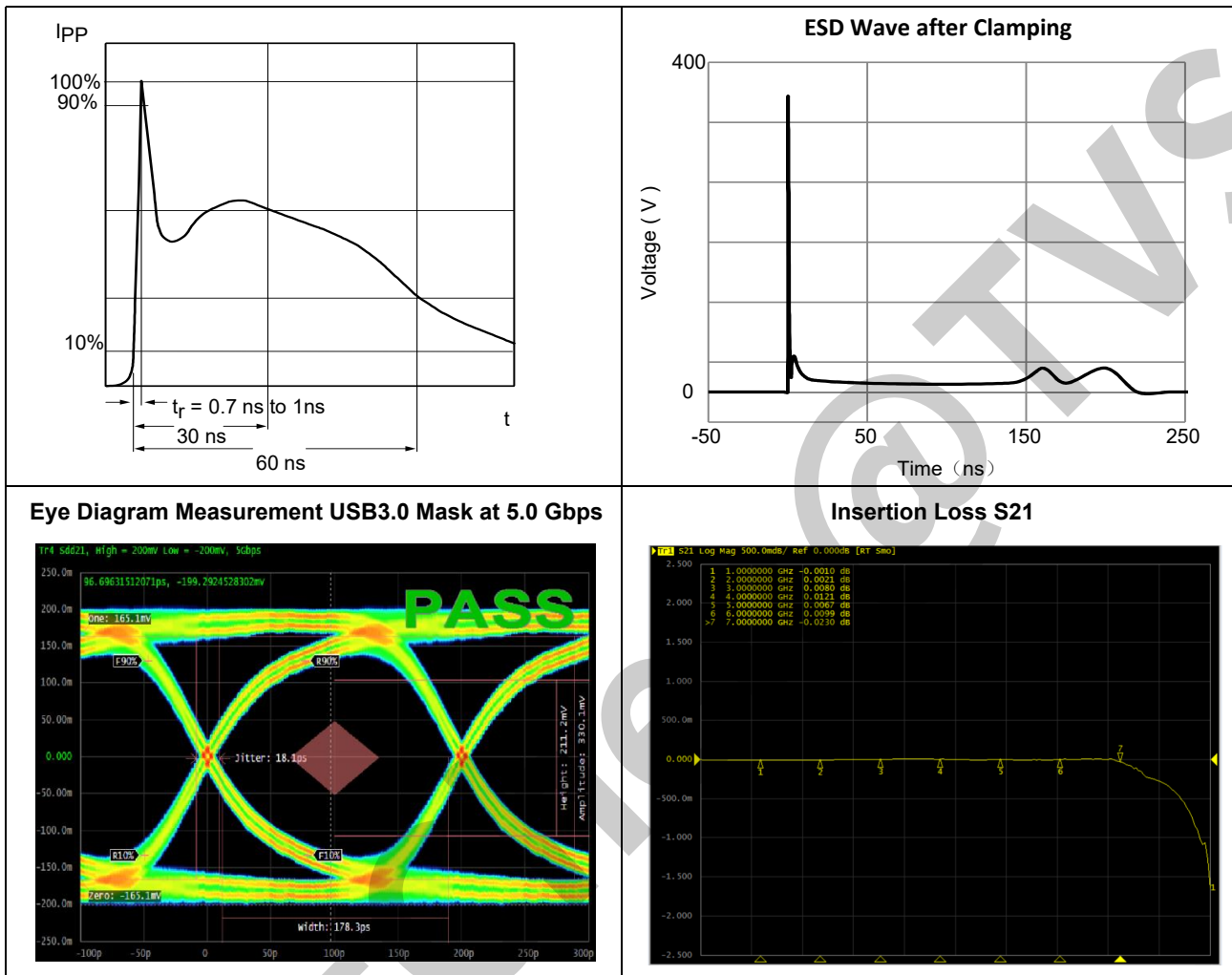
($T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Rated Voltage	VR		-	-	3.3	V
Trigger Voltage	VT	IEC 8KV Contact	-	300	-	V
Leakage Current	IL	DC 5V	-	0.01	0.10	μA
Clamping Voltage	VC	IEC 8KV Contact	-	35	-	V
Capacitance	CP	VR=0V, f=1MHz	-	0.05	-	pF

ESD Clamping Test

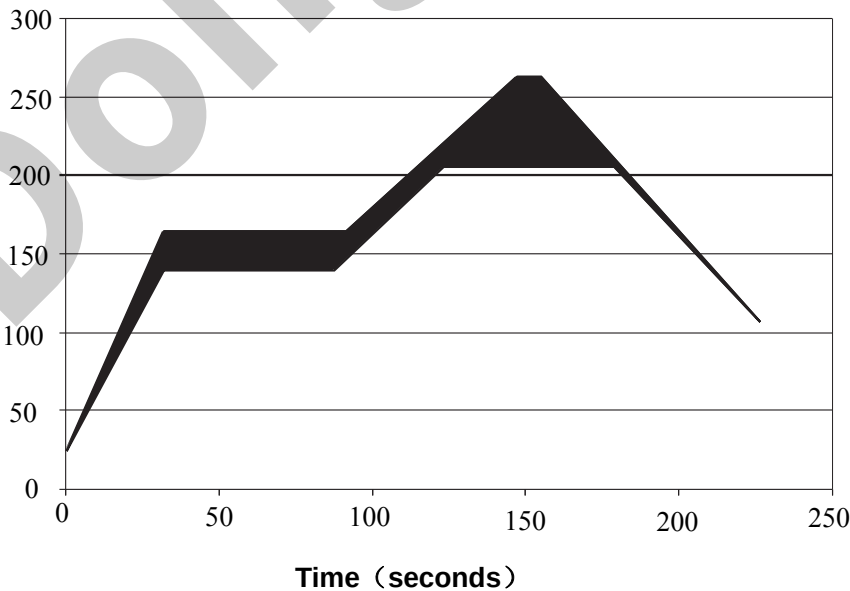


ESD Clamping Test Waveforms



Solder Reflow Recommendations

Temperatures (°C)

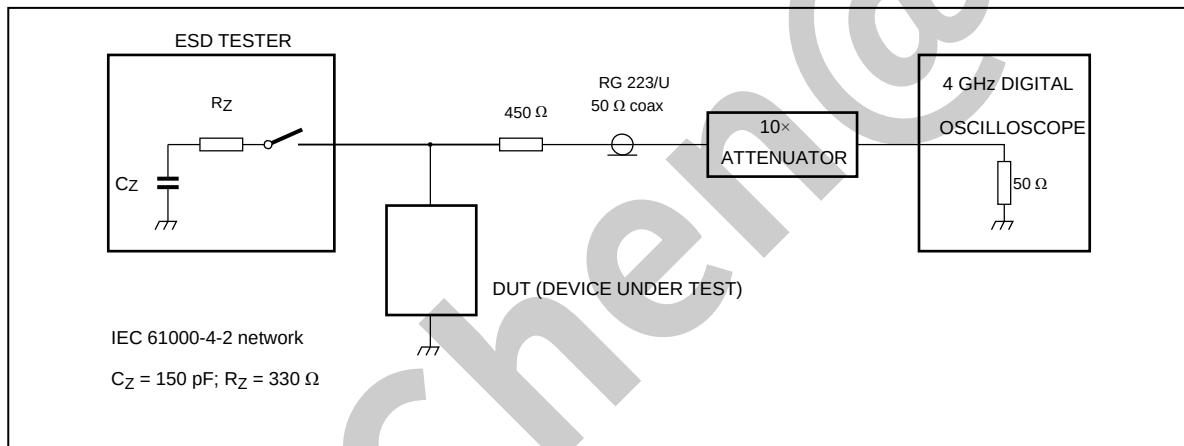


Electrical Characteristics

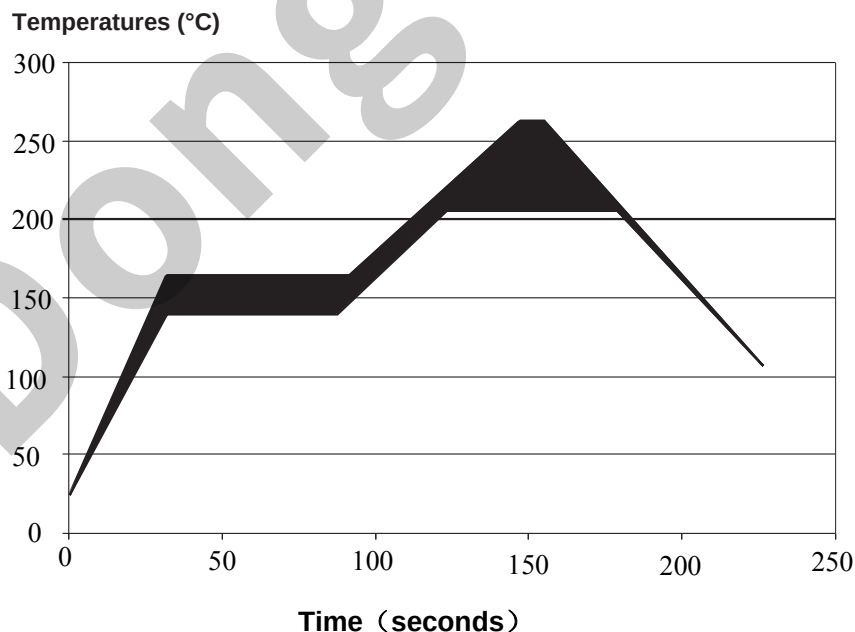
(T_A = 25 °C unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Rated Voltage	VR		-	-	3.3	V
Trigger Voltage	VT	IEC 8KV Contact	-	300	-	V
Leakage Current	IL	DC 5V	-	0.01	0.10	uA
Clamping Voltage	VC	IEC 8KV Contact	-	35	-	V
Capacitance	CP	VR=0V, f=1MHz	-	0.05	-	pF

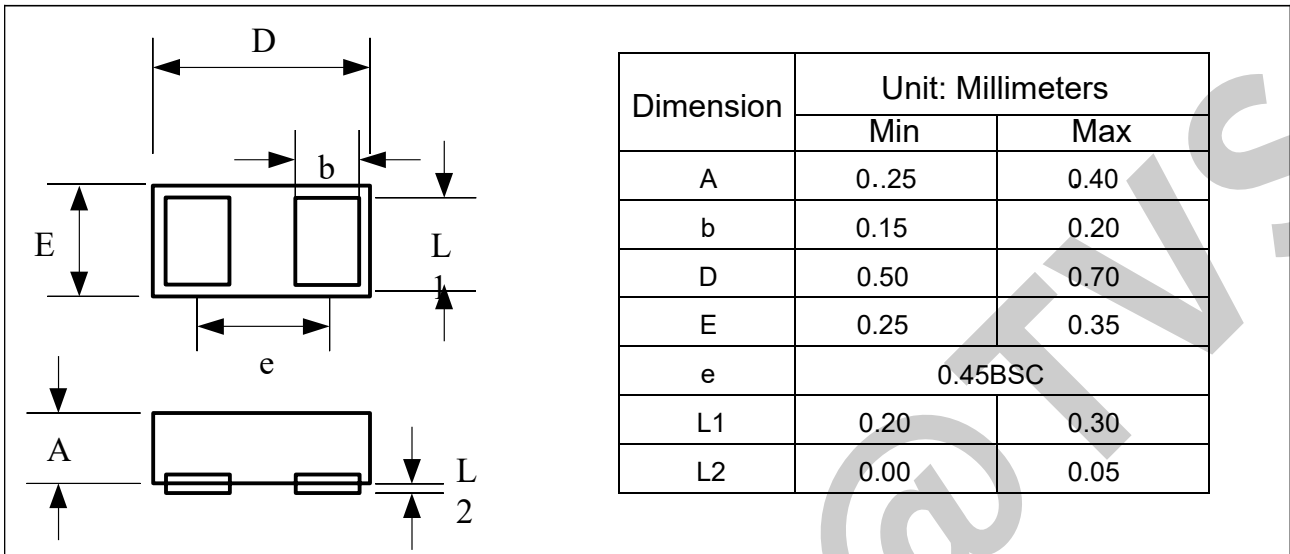
ESD Clamping Test



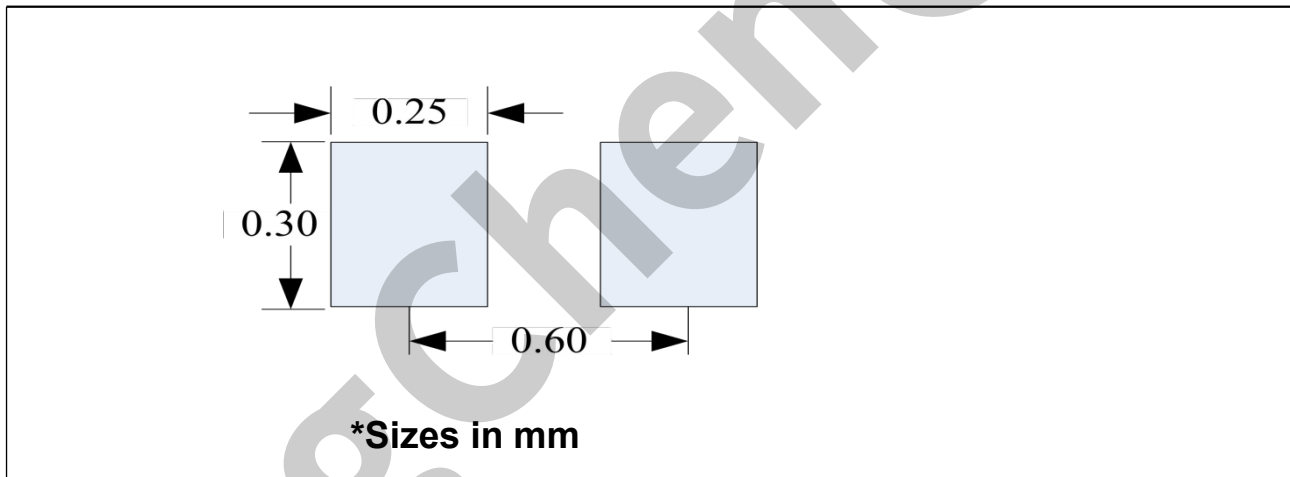
Solder Reflow Recommendations



Package Dimensions



Pad Dimensions



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Should you intend to use these products with equipment or devices which require an extremely high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, aerospace machinery, nuclear-reactor controllers, fuel controllers, and other safety devices), please be sure to consult with our sales representative in advance.

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