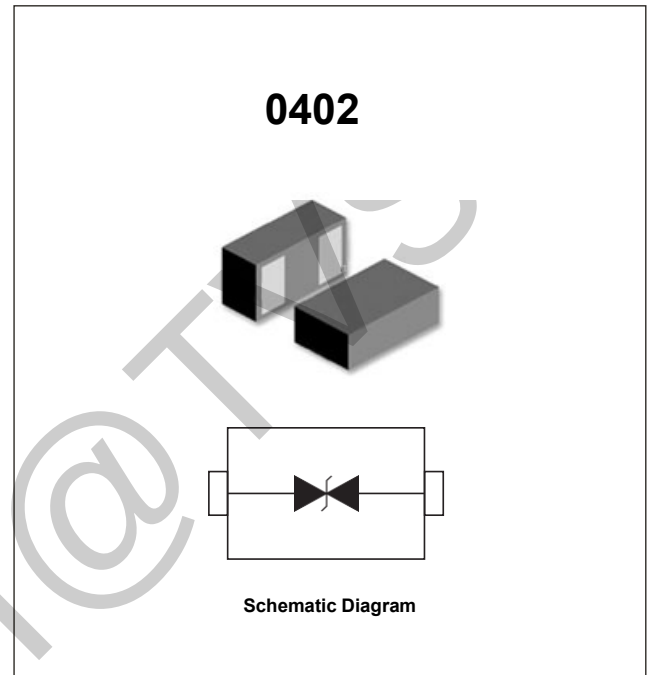


Features

- Ultra low capacitance ESD protection for high speed data lines
- ESD contact discharge typical 8KV, max 15KV per IEC61000-4-2
- ESD air discharge typical 15KV, max 25KV per IEC61000-4-2
- Extremely low capacitance (0.05pF typical, I/O to GND)
- Very low leakage current
- Fast response time
- Bi-directional ESD protection
- Lead free solder termination

Mechanical Data

- 0402 surface mount package
- Tape & Reel packaging, 10,000pcs per reel
- Net weight 0.44 mg
- RoHS compliant



Applications

- HDMI, DVI, Display Port (DP), UDI interfaces
- USB2.0 and USB3.0
- Gigabit Ethernet
- IEEE1394 interface
- Mobile Display Digital Interface (MDDI)

Ordering information

Order code	Marking	Package	Packaging option	Base quantity	Packaging specification
DCESD0402P05	see below	0402	Tape and reel	10000pcs / reel	EIA STD RS-481

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

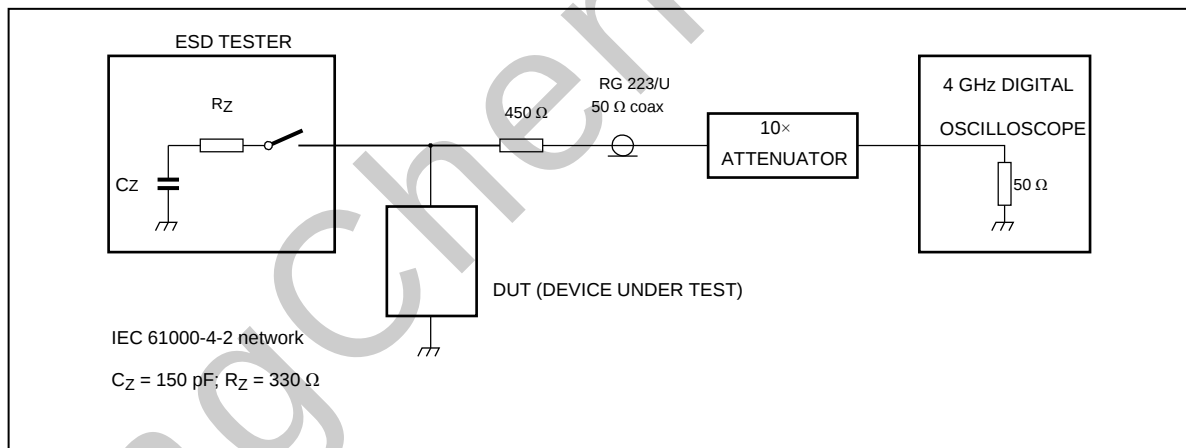
Parameter	Symbol	Value	Unit
ESD contact/air discharge (IEC-61000-4-2)	V _{ESD}	15/25	kV
Operation temperature	T _{OP}	-55 to +125	°C
Lead temperature	T _L	260	°C
Storage temperature	T _{STG}	-55 to +125	°C

Electrical Characteristics

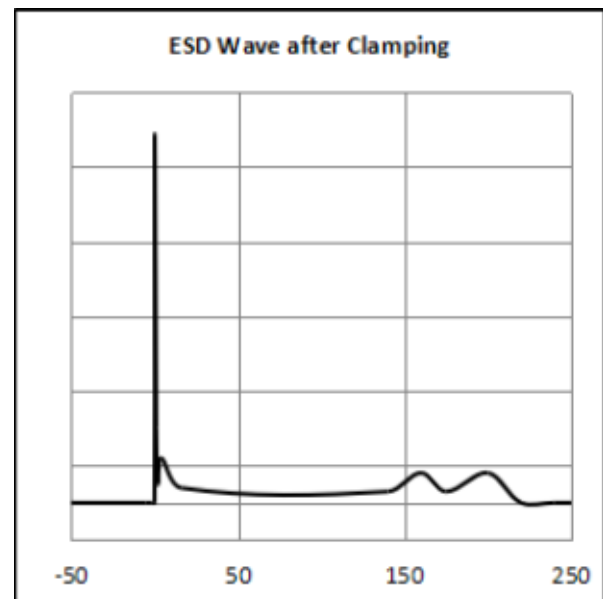
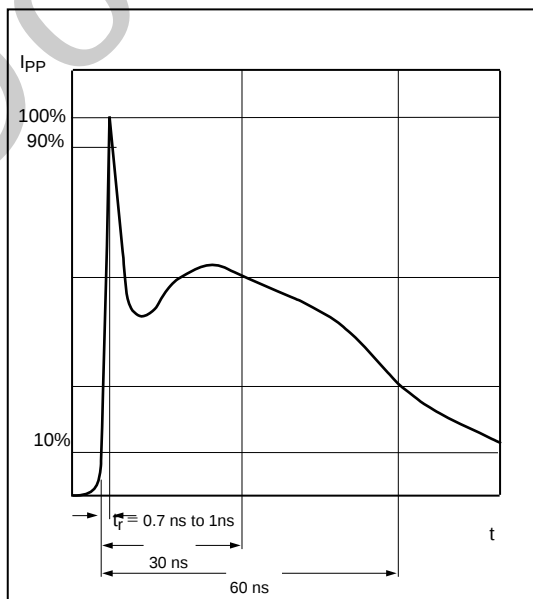
($T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V_{RWM}		-	-	5	V
Reverse Leakage Current	I_R	$V_{RWM} = 5\text{V}$	-	0.01	0.10	μA
Punch-Through Voltage	V_{pt}	IEC61000-4-2 8KV contact discharge	-	300	-	V
Clamping Voltage(ESD)	V_{CE}	IEC61000-4-2 8KV contact discharge	-	35	-	V
Junction Capacitance	C_J	$V_R=0\text{V}$, $f=1\text{MHz}$	-	0.05	-	pF

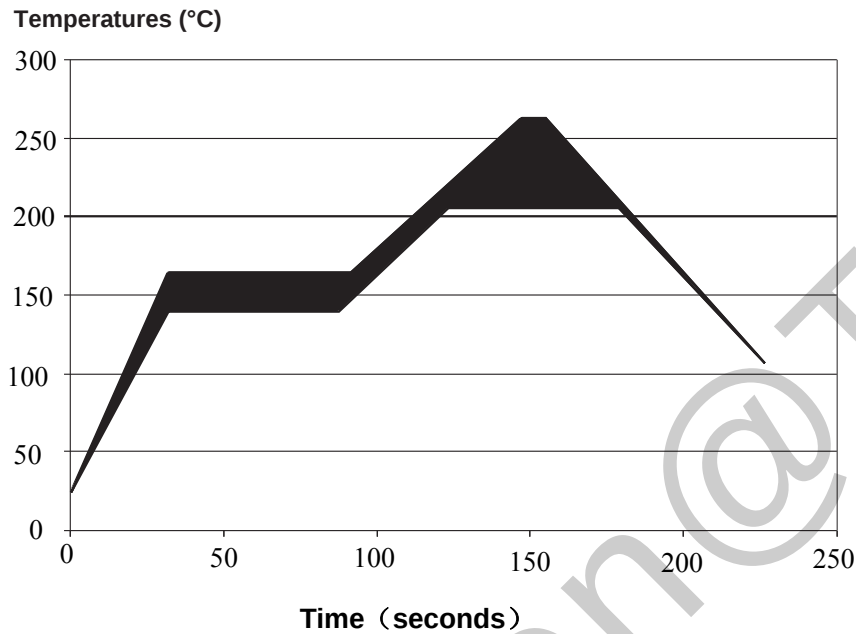
ESD Clamping Test



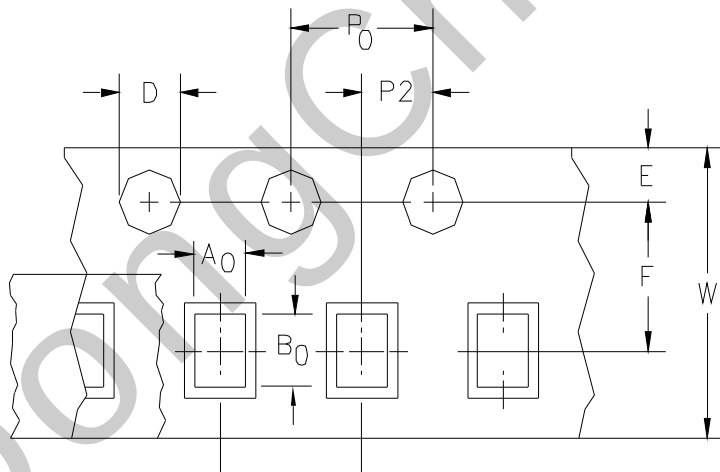
ESD Clamping Test Waveforms



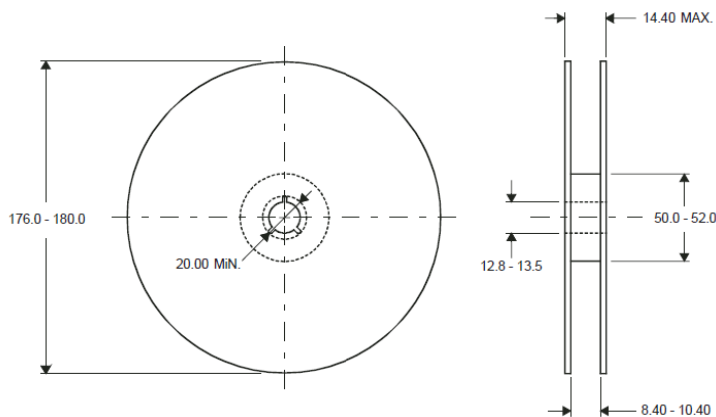
Solder Reflow Recommendations



Package Information

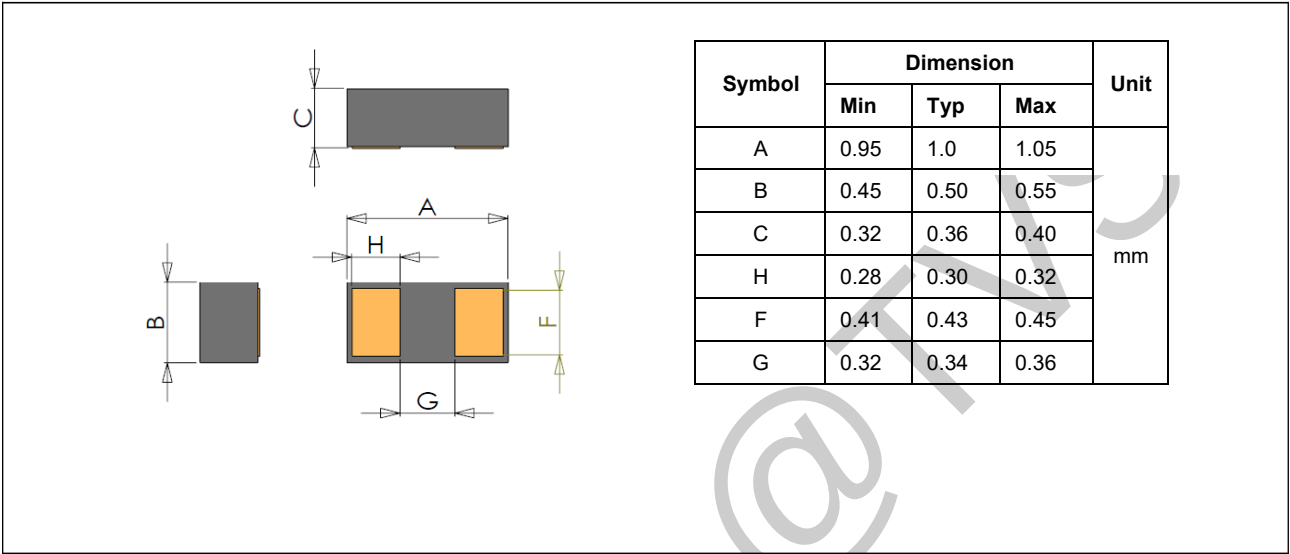


Dimension	Typical	Unit
A0	0.68	mm
B0	1.17	
D	1.55	
P0	4.00	
P1	2.00	
P2	2.00	
E	1.75	
F	3.50	
W	8.00	

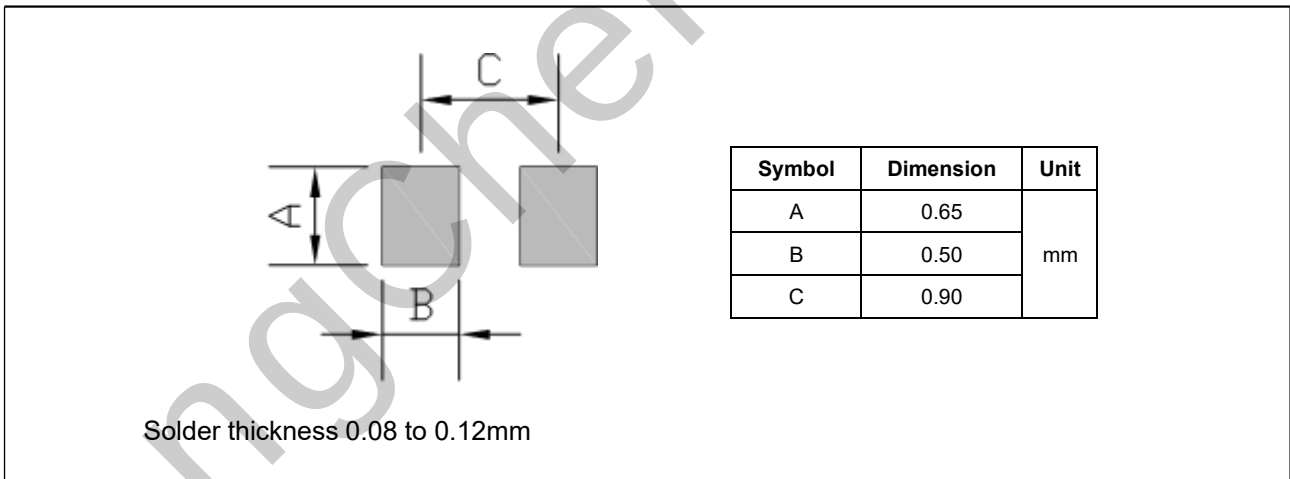


DIMENSIONS ARE: MILLIMETERS

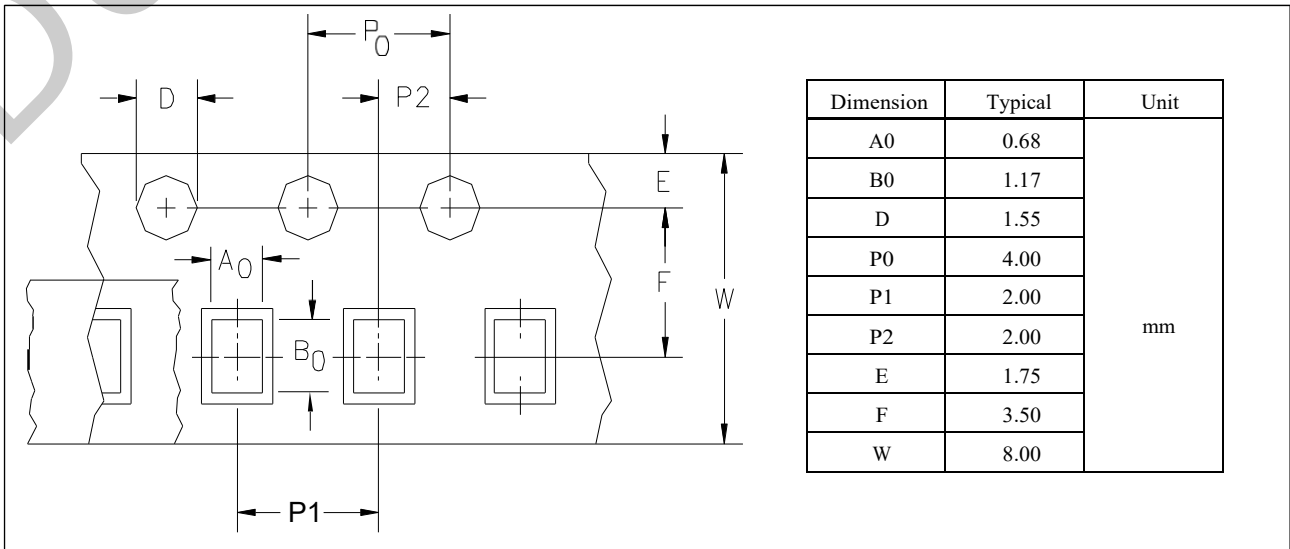
Package Dimensions



Pad Dimensions



Package Information



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