

Surface Mount Polymeric ESD Suppressor

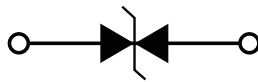
● Features

- Low leakage current
- Fast response time
- 0402 surface mount package
- IEC 61000-4-2 (ESD Air): $\pm 15\text{kV}$
- IEC 61000-4-2 (ESD Contact): $\pm 8\text{kV}$

● Applications

- USB 3.0/3.1
- HDMI 1.3/1.4/2.0
- RF Antenna
- SATA and eSATA interface
- Smart Phone/Mobile Internet

● Function Diagram

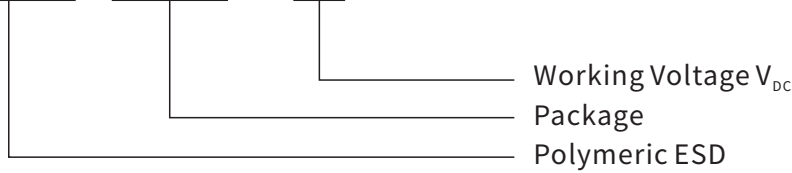


Reverse Working Voltage
5V Max.
Ultra Low capacitance
0.05pF(Typ)



● Part Number Code

PESD 0402 - 05



● Maximum Ratings (Ta=25°C Unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{ESD}	Electrostatic Discharge Voltage	ESD per IEC 61000-4-2(Air)	± 15	KV
		ESD per IEC 61000-4-2(Contact)	± 8	KV
T_J	Operating JunctionTemperature Range	—	-55 to +125	°C
T_{STG}	Operating JunctionTemperature Range	—	-40 to +85	°C

● Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	CONDITION	Min	Typ	Max	UNIT
Continuous Operating Voltage	V_{DC}	$T_a=25^{\circ}C$	—	—	5.0	V
Trigger Voltage	V_T	IEC61000-4-2 8kV contact discharge	—	450	—	V
Reverse Leakage Current	I_R	DC 5V shall be applied on component	—	—	10	nA
Clamping Voltage	V_C	IEC61000-4-2 8kV contact discharge	—	40	—	V
Capacitance	C_J	Measured at 10MHz	—	0.05	—	pF

● Ratings And Characteristics Curves (Ta=25°C Unless otherwise specified)

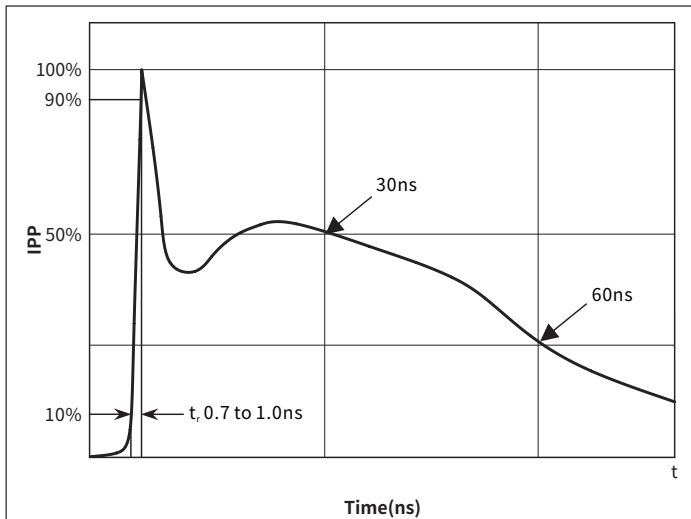


Fig.1 ESD Clamping Test Waveform

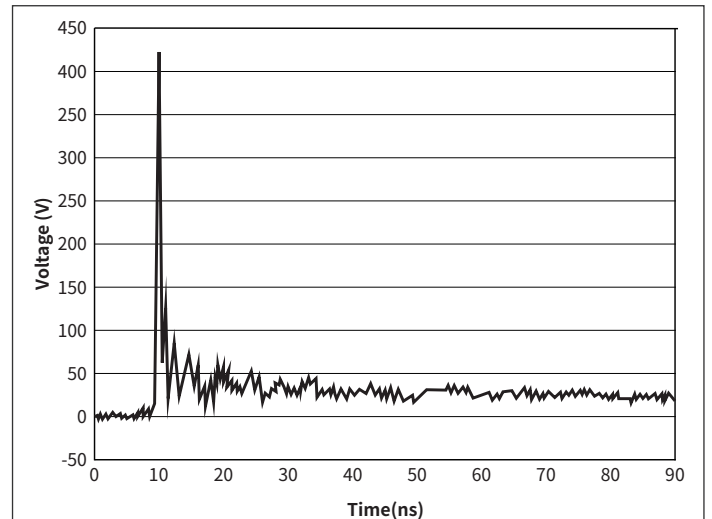


Fig.2 ESD Waveform after Clamping

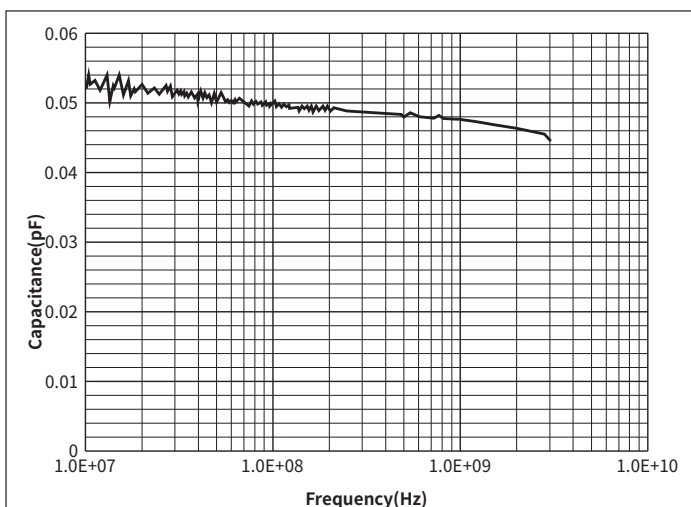
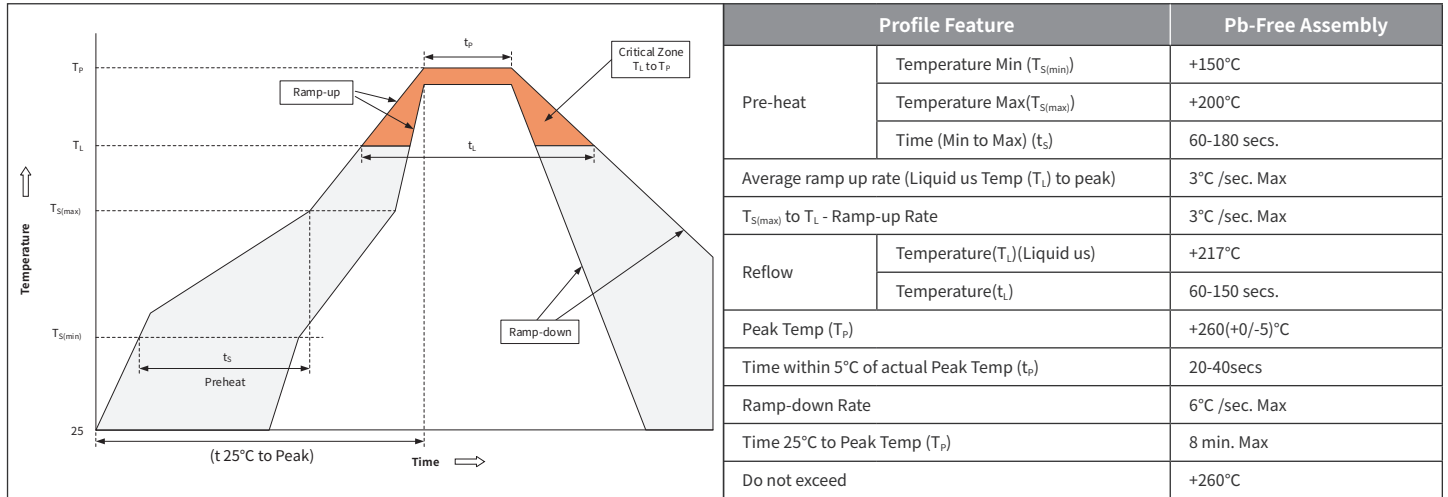


Fig.3 Capacitance VS Frequency

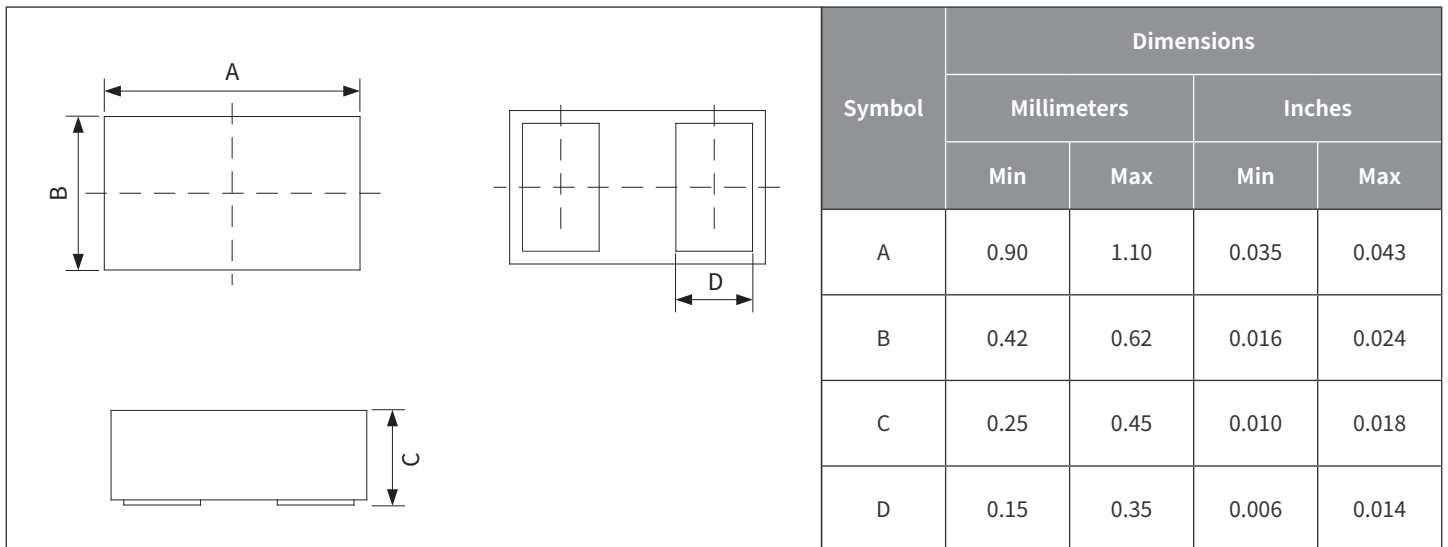
Ordering Information

PREFERRED P/N	PACKAGE	SIZE(mm)	DELIVERY MODE	MPQ(PCS)
PESD0402-05	0402	1.00×0.52×0.38	7" REEL	10,000

Recommended Soldering Conditions



Package Outline Dimensions (0402 package)



Suggested Pad Layout

