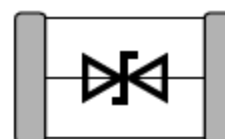
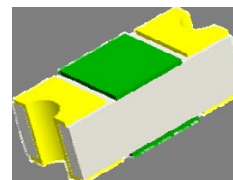


Features

- ESD protection for high speed data lines to
IEC61000-4-2 ESD contact discharge 8KV
IEC61000-4-2 ESD air discharge 15KV
- Surface mount
- Low capacitance
- Very low leakage current
- Fast response time
- Bi-directional ESD protection
- Lead free solder termination



Application

- Cell Phone Handsets and Accessories
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Cordless Phones
- Digital Cameras
- MP3 Players

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

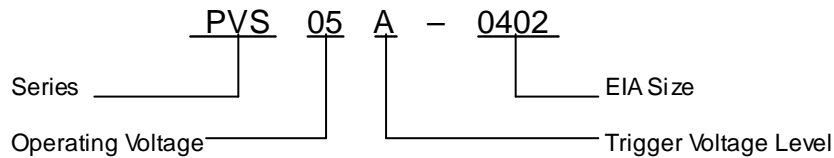
Electrical Characteristics

Electrical Characteristics						
Parameter	Symbol	Condition	Min	Typ	Max	Units
Continuous operating voltage	V_{DC}	-	---	---	5	V
Clamping voltage	V_C	IEC61000-4-2 8KV contact discharge	---		20	V
Leakage current	I_L	12V	---	0.10	10	nA
Capacitance	C_P	$V_R = 0V, f = 1MHz$	1.0	2.0	3.0	pF
Operating Temperature	---	-	-40	---	90	°C
Storage Temperature	---	-	-55	---	150	°C
ESD pulse withstand	Pulses	IEC61000-4-2 8KV contact discharge		---	---	---

Notes:

1, Trigger and clamping voltage measure per IEC 61000-4-2, 8KV contact discharge method

Part Numbering



Environmental Specifications

Operation temperature: -40~90℃

Moisture Resistance, Steady state: MIL-STD-833, Method 1004.7, 85% RH, 85℃, 1000hrs

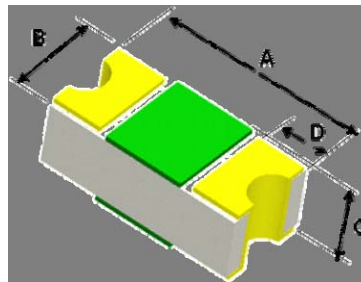
Thermal Shock: MIL-STD-202, Method 107G, -55℃ to 150℃, 30 min cycle, 10 cycles.

Vibration: MIL-STD-202F, Method 201A, (10 to 55 to 10HZ, 1 min. cycle, 2hrs each in X-Y-Z)

Chemical Resistance: ASTM D-543, 4hrs @40℃, 3 solutions (H₂O, detergent solution, deluxer)

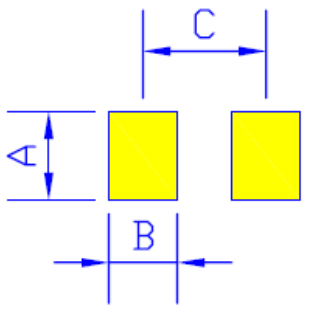
Solder leach resistance and terminal adhesion: Per EIA-576 test

Product Dimensions (mm)



Length A		Width B		Height C		Terminal width D		Unit
Min	Max	Min	Max	Min	Max	Min	Max	
0.95	1.15	0.45	0.65	0.33	0.43	0.25	0.35	mm

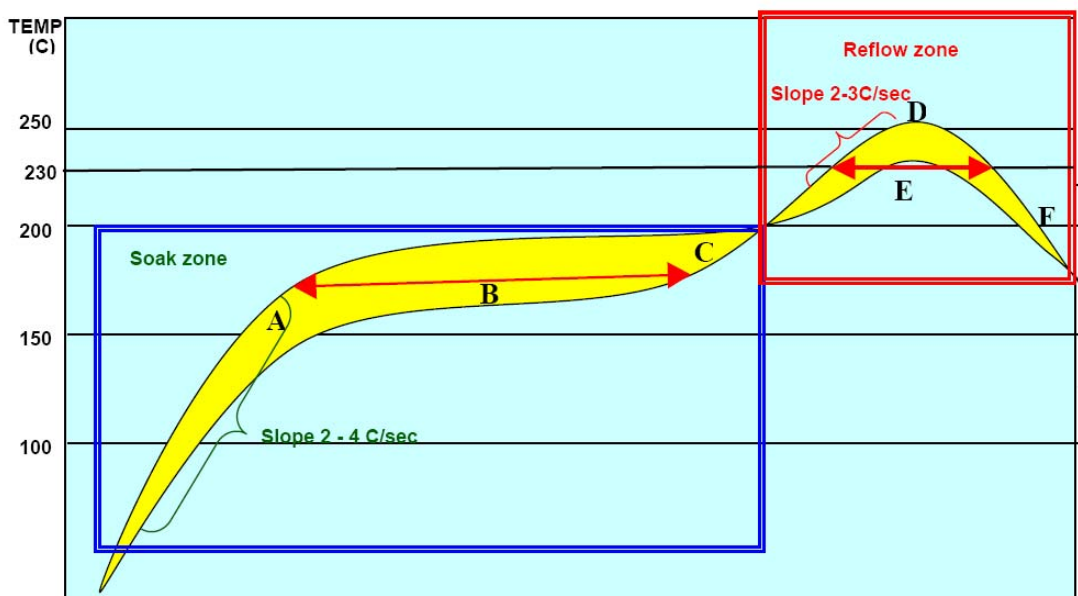
Recommended PAD Layout



A		B		C		Unit
Min	Max	Min	Max	Min	Max	
0.60	0.70	0.45	0.55	0.85	0.95	mm

Solder Reflow Recommendation

PolyTVS Solder Profile



Item	Process	Description	Reach Temp.	Time or Rate
A	Soak Start	From ambient to soak temperature and soak start	150°C - 180°C	2°C - 4°C /
B	Soak time	Soak time	---	60s - 120s
C	Soak end	Soak end	180°C - 200°C	---
D	Peak Temp.	From soak temperature to Peak temperature	260°C	2°C - 3°C /
E	Time above	Main heating time	230°C - 260°C	40s - 60s
F	Cooling	From main heating temperature to 100°C	100°C	Max. 4°C / sec

Notes:

1* Peak temperature can be high to 260°C, and the recommendation time is as below

at 230°C	40s ~ 60s
at 240°C	30s ~ 40s
at 260°C	5s ~ 10s

2* Recommended reflow methods: IR, Vapor phase oven, hot air oven, wave solder.

3* Devices can be cleaned using standard industry methods and solvents.

4* Component can withstand 270°C 10 sec.

5* If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

Package Information

Tape & Reel: 10000pcs per reel.