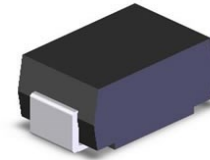


SPD81242A

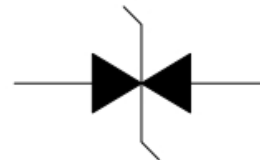
1-Line, 400W, TVS

[Http://www.sh-willsemi.com](http://www.sh-willsemi.com)
Descriptions

SPD81242A protect sensitive electronics against voltage transients induced by inductive load switching and lightning. Ideal for the protection of I/O interfaces, V_{CC} bus and other integrated circuits.


Features

- For surface mount application
- Excellent clamping capability
- Low profile package
- Fast response time: Typically less than 1.0ps from 0V to 26.7V
- Low inductance
- GPP

SMA (DO-214AC)

Schematic Diagram
Mechanical Data

- Case: Molded plastic
- Mounting position: Any
- Weight: 0.063 grams

Order information

Device	Dim (mm)	Shipping
SPD81242A-2/TR	5.1*2.6*2.1	5000/Tape&Reel

Absolute maximum ratings

Part Number	Reverse Stand off Voltage V_R (V)	Breakdown Voltage $V_{BR@I_T}$ (V)		Test Current I_T (mA)	Maximum Clamping Voltage V_C @ I_{PP} (V)	Maximum Peak Pulse Current I_{PP} (A)	Maximum Reverse Leakage $I_R @ V_R$ (μA)
		MIN	MAX				
SPD81242A	24.0	26.7	30.7	1.0	38.9	10.3	1.0

Notes:

- 1) 10/1000 μs waveform

Rating	Symbol	Value	Units
Peak Pulse Power on 10/1000 μs waveform	P_{PPM}	400	W
Peak Pulse Current of on 10/1000 μs waveform	I_{PPM}	10.3	A
Operating Junction Temperature Range	T_J	-55 to +150	$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to +150	$^{\circ}C$

Notes :

1. Mounted on 5.0mm² (0.03mm thick) Copper Pads to each terminal

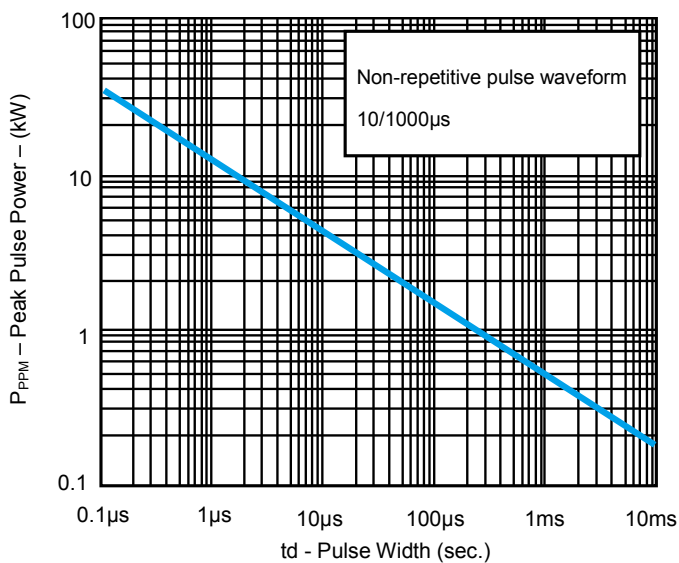
Typical characteristics ($T_A=25^{\circ}C$, unless otherwise noted)


Fig. 1 Peak Pulse Power

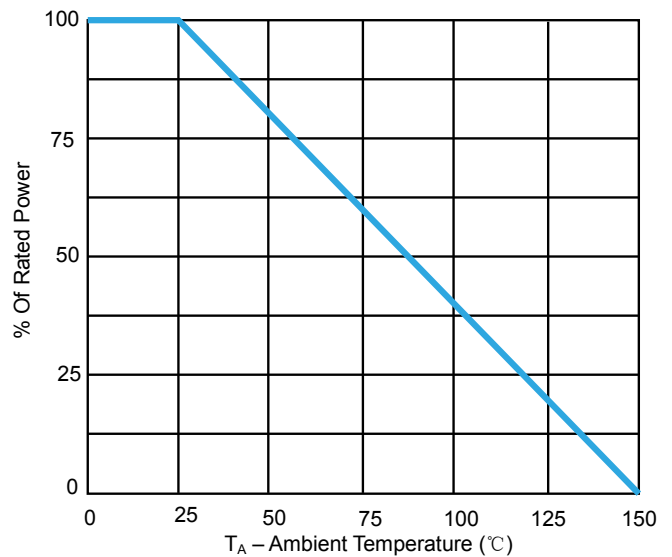
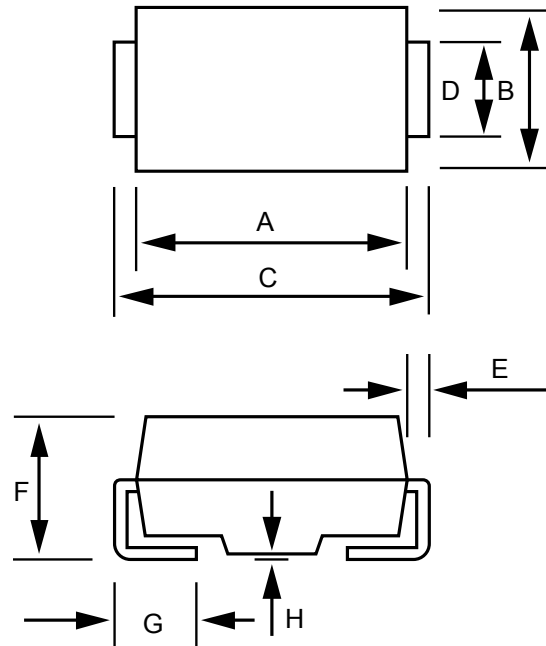
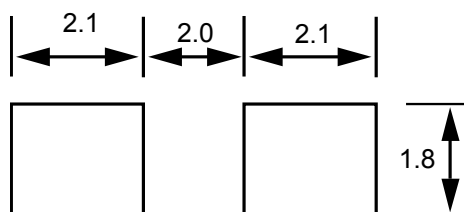


Fig. 2 Pulse Derating Curve

Package outline dimensions (Unit:mm)
SMA


Symbol	Dimensions in millimeter	
	Min.	Max.
A	3.990	4.500
B	2.540	2.790
C	4.930	5.280
D	1.250	1.650
E	0.152	0.305
F	1.980	2.290
G	0.780	1.520
H	-	0.203

Recommend land pattern (Unit: mm)

Notes:

This recommended land pattern is for reference purposes only. Please consult your manufacturing group to ensure your PCB design guidelines are met.