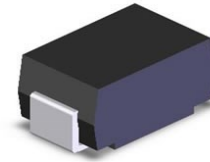


SPD81052A

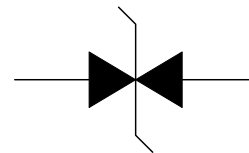
1-Line, 400W, TVS

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

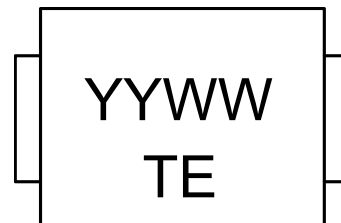
SPD81052A protect sensitive electronics against voltage transients induced by inductive load switching and lightning. Ideal for the protection of I/O interfaces, V_{CC} bus and other integrated circuits.


Features

- For surface mount application
- Excellent clamping capability
- Low profile package
- Fast response time: Typically less than 1.0ps from 0V to 6.40V
- Low inductance
- GPP

SMA (DO-214AC)

Schematic Diagram
Mechanical Data

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



YY = Year Code
 WW = Week Code
 TE = Device Code

Marking (Top View)
Order information

Device	Dim (mm)	Shipping
SPD81052A-2/TR	5.1*2.6*2.1	5000/Tape&Reel

Absolute maximum ratings

Rating	Symbol	Value	Units
Peak Pulse Power on 10/1000μs waveform	P _{PPM}	400	W
Peak Pulse Current of on 10/1000μs waveform	I _{PPM}	43.5	A
Junction Temperature	T _J	-55~150	°C
Operating Temperature	T _{OP}	-40~125	°C
Storage Temperature Range	T _{STG}	-55~150	°C

Notes :

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

Electrical characteristics (T_A=25°C, unless otherwise noted)

Part Number (Bi)	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				
SPD81052A	5.0	6.40	7.25	10.0	9.2	43.5	800

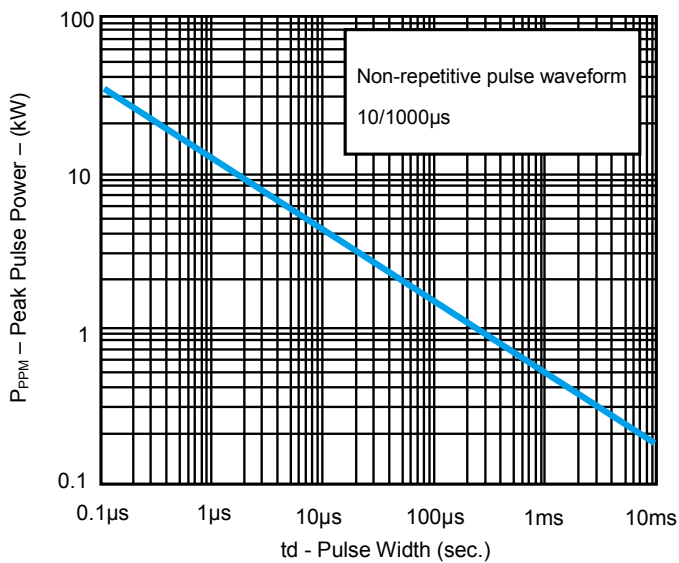
Typical characteristics (T_A=25°C, unless otherwise noted)


Fig. 1 Peak Pulse Power

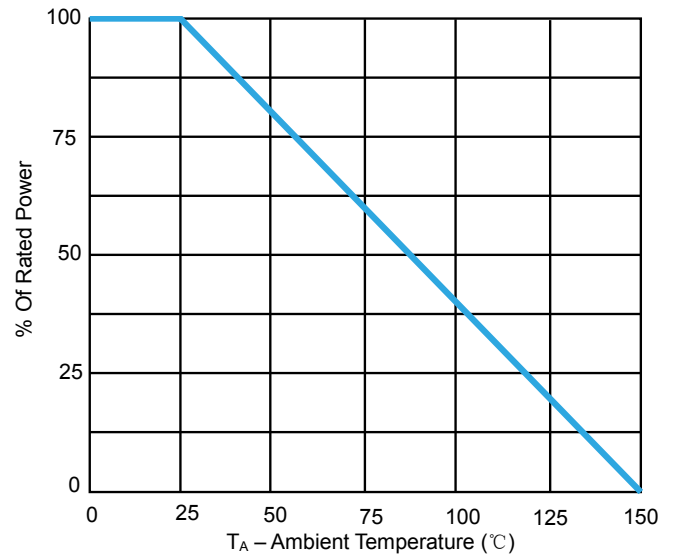
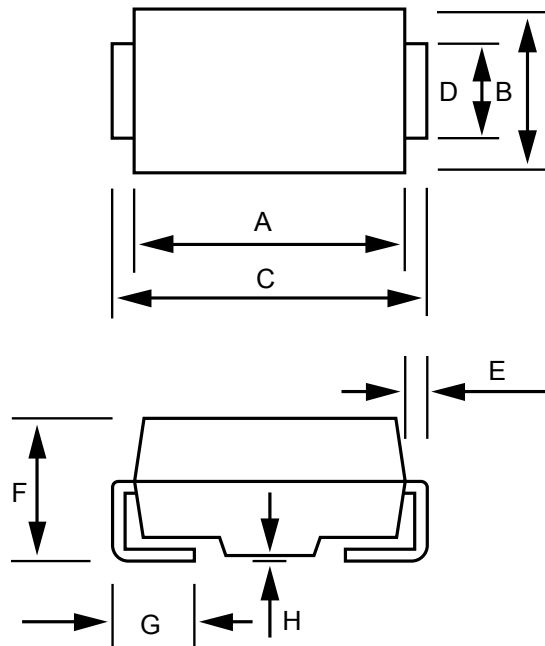
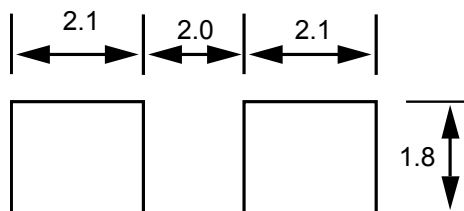


Fig. 2 Pulse Derating Curve

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.

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