

**SPD84201C**

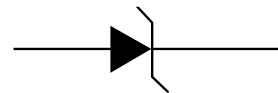
1-Line, 3000W, TVS

<http://www.sh-willsemi.com>
**Descriptions**

SPD84201C 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.


**SMC**
**Features**

- For surface mount application
- Excellent clamping capability
- Low profile package
- Fast response time: Typically less than 1.0ps from 0V to 22.2V
- Low inductance
- GPP



SPD84201C

**Mechanical Data**

- Case: Molded plastic
- Mounting position: Any
- Weight: 0.21 grams

**Schematic Diagram**


XXXX = Date code

HEV = Device code

**Marking (Top View)**
**Order information**

Device	Package	Shipping
SPD84201C -2/TR	SMC	3000/Tape&Reel

**Absolute maximum ratings**

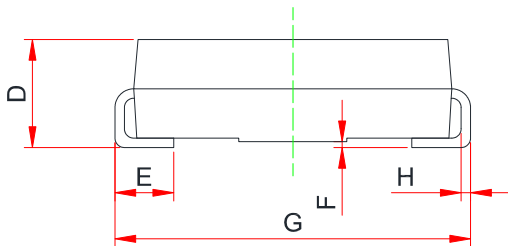
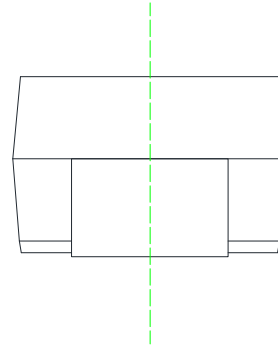
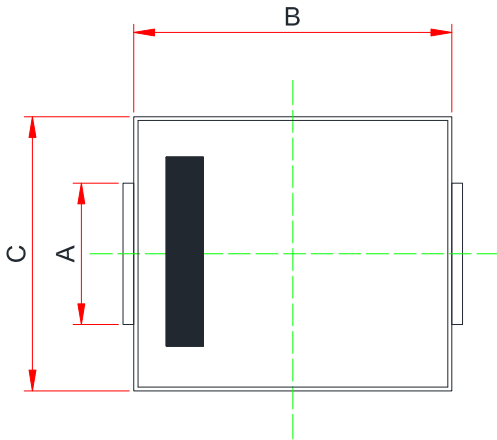
Part Number	Reverse Stand off Voltage $V_R$ (V)	Breakdown Voltage $V_{BR} @ I_T$ (V)		Test Current $I_T$ (mA)	Maximum Clamping Voltage $V_C @ I_{PP}$ (V)	Maximum Peak Pulse Current $I_{PP}$ (A)	Maximum Reverse Leakage $I_R @ V_R$ ( $\mu A$ )
		MIN	MAX				
SPD84201C	20.0	22.2	25.5	1	32.4	92.6	5

**Thermal considerations**

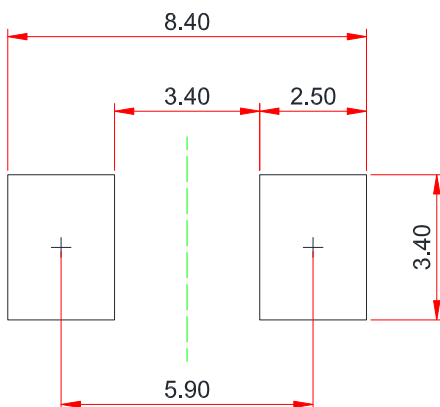
Rating	Symbol	Value	Units
Peak Pulse Power on 10/1000 $\mu s$ waveform	$P_{PPM}$	3000	W
Peak Pulse Current of on 10/1000 $\mu s$ waveform	$I_{PPM}$	92.6	A
Peak Forward Surge Current , 8.3ms Single Half Sine-wave Superimposed on Rated Load,(JEDEC Method)	$I_{FSM}$	300	A
Operating Junction Temperature Range	$T_J$	-55 to +150	$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-55 to +150	$^{\circ}C$

**Notes :**

1. Mounted on 5.0mm<sup>2</sup> (0.03mm thick) Copper Pads to each terminal

**Package outline dimensions (Unit:mm)**
**SMC**


Symbol	Dimensions in millimeter		
	Min.	Typ.	Max.
A	2.86	--	3.160
B	6.520	--	7.020
C	5.520	--	6.150
D	1.980	--	2.590
E	0.750	--	1.510
F	-	--	0.203
G	7.640	-	8.020
H	0.152	--	0.305

**Recommend land pattern (Unit: mm)**


*Note: This land pattern is for your reference only.  
Actual pad layouts may vary depending on application.*