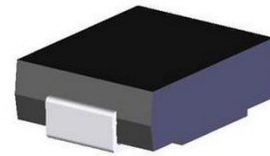


SPD84581C

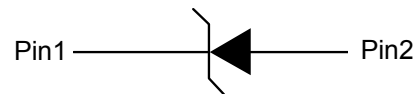
1-Line, 3000W, TVS

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

SPD84581C 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 64.4V
- Low inductance
- GPP


Schematic Diagram
Mechanical Data

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



XXXX = Data code
HGG = Device code

Marking (Top View)
Order information

Device	Package	Shipping
SPD84581C-2/TR	SMC	3000/Tape&Reel

Absolute maximum ratings

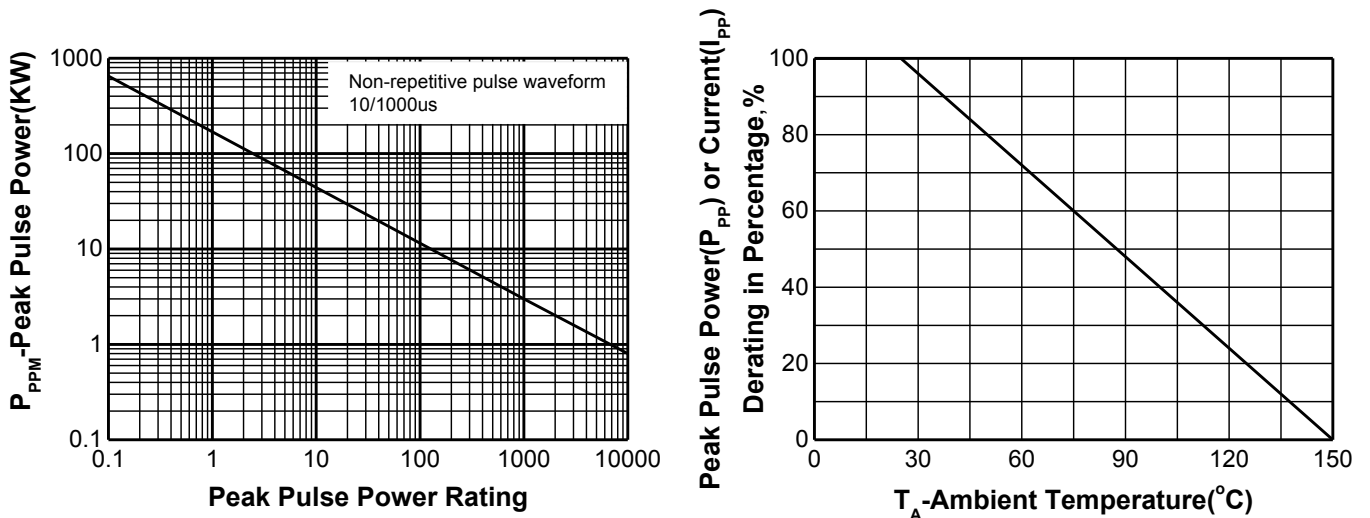
Rating	Symbol	Value	Units
Peak Pulse Power on 10/1000μs waveform	P _{PPM}	3000	W
Peak Pulse Current of on 10/1000μs waveform	I _{PPM}	32.1	A
Junction temperature	T _J	-55~150	°C
Operating temperature	T _{OP}	-40~125	°C
Storage Temperature Range	T _{STG}	-55~150	°C

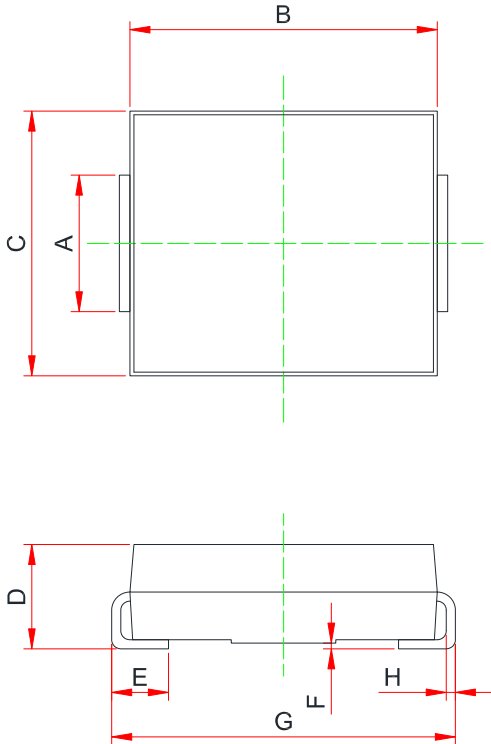
Notes:

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

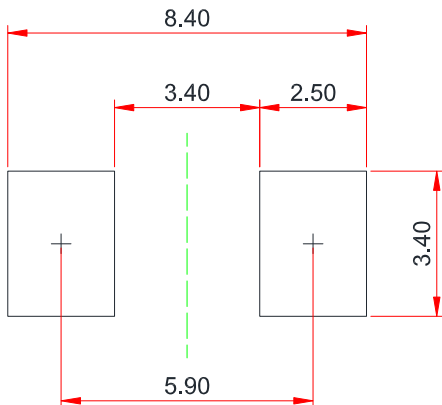
Electrical characteristics (T_A=25°C, unless otherwise noted)

Part Number	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				
SPD84581C	58	64.4	74.1	1	93.6	32.1	2

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


Package outline dimensions (Unit: mm)
SMC


Symbol	Dimensions in millimeter		
	Min.	Typ.	Max.
A	2.900	--	3.200
B	6.600	--	7.110
C	5.590	--	6.220
D	2.060	--	2.620
E	0.760	--	1.520
F	-	--	0.203
G	7.750	-	8.130
H	0.125	--	0.305

Recommended land pattern (Unit: mm)


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