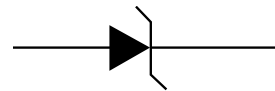


SPD83241C

1-Line, 1500W, TVS

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

SPD83241C 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


SPD83241C

Schematic Diagram
Features

- For surface mount application
- Excellent clamping capability
- Low profile package
- Fast response time: Typically less than 1.0ps from 0V to 24V
- Low inductance
- GPP

Mechanical Data

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

Order information

Device	Dim (mm)	Shipping
SPD83241C-2/TR	7.8*5.8*2.3	3000/Tape&Reel

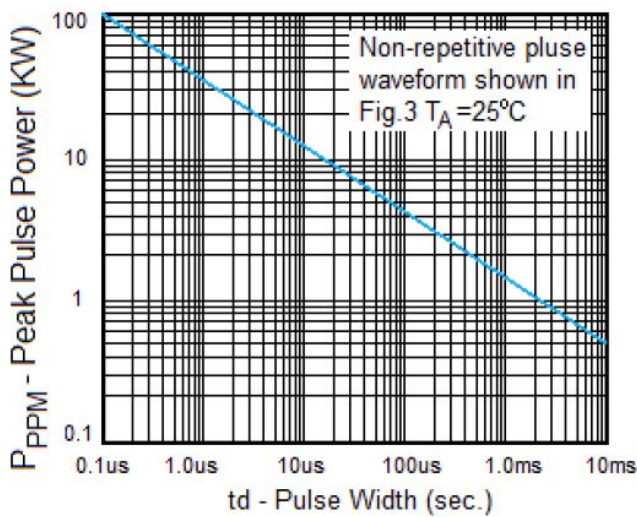
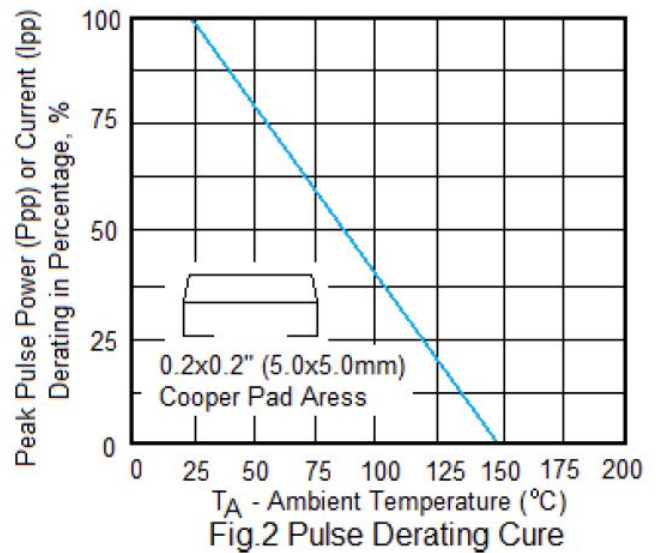
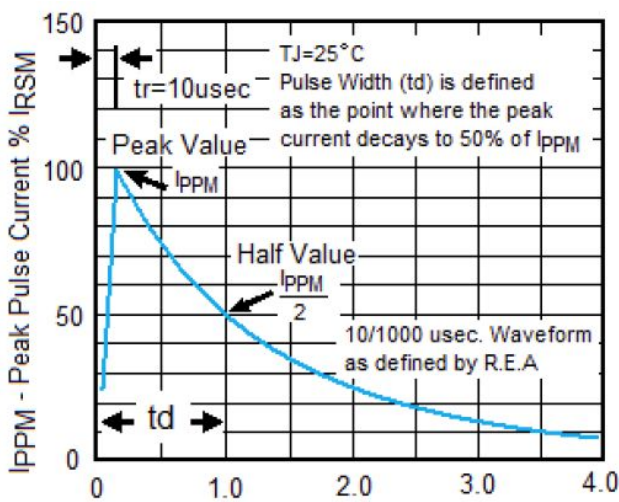
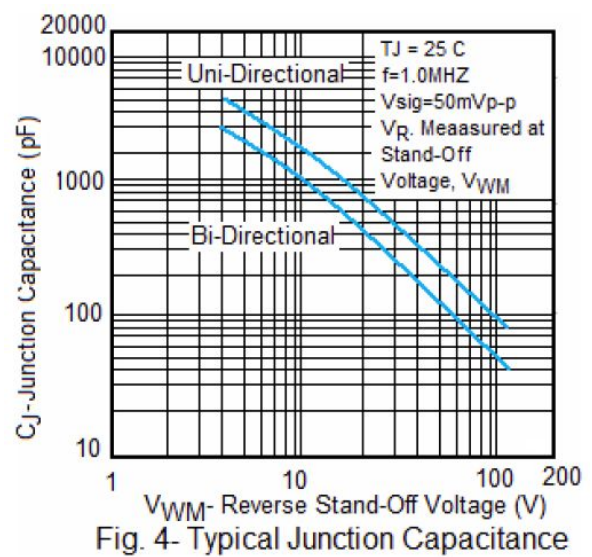
Rating	Symbol	Value	Units
Peak Pulse Power on 10/1000μs waveform	P _{PPM}	1500	W
Peak Pulse Current of on 10/1000μs waveform	I _{PPM}	38.6	A
Peak Forward Surge Current , 8.3ms Single Half Sine-wave Superimposed on Rated Load,(JEDEC Method)	I _{FSM}	200	A
Operating Junction Temperature Range	T _J	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

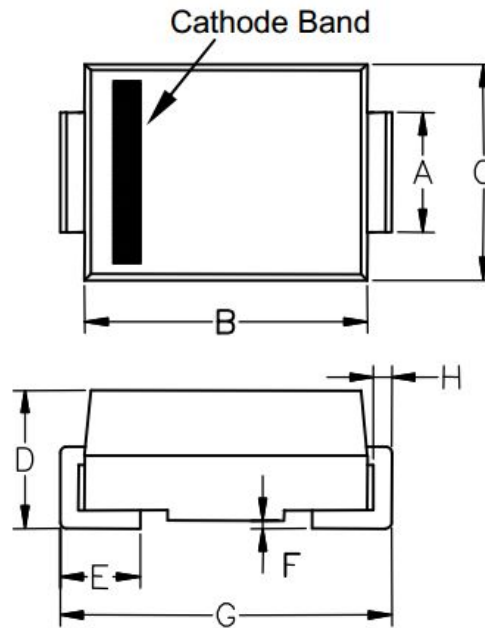
Notes :

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

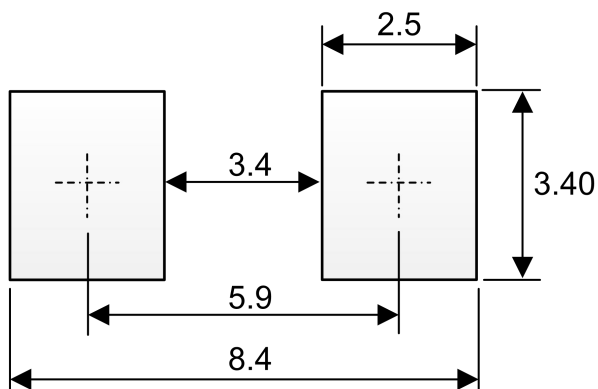
Absolute maximum ratings

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				
SPD83241C	24	26.7	30.7	1	38.9	38.6	5

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

Fig. 1 Peak Pulse Power Rating

Fig.2 Pulse Derating Curve

Fig.3 Pulse Waveform

Fig. 4- Typical Junction Capacitance

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.*