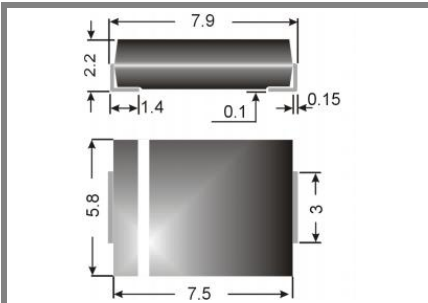


# 1,5 SMCJ 160 ... 1,5 SMCJ 180CA



## Surface mount diode

### Unidirectional and bidirectional Transient Voltage Suppressor diodes

1,5SMCJ160 ... 1,5SMCJ180CA

#### Pulse Power

Dissipation: 1500 W

#### Stand-off

voltage: 160 ... 180 V

#### Features

- Max. solder temperature: 260°C
- Plastic material has UL classification 94V-0
- For bidirectional types (suffix "C" or "CA") electrical character. apply in both directions
- The standard tolerance of the breakdown voltage for each type is ±10%. Suffix "A" denotes a tolerance of ±5% for the breakdown voltage

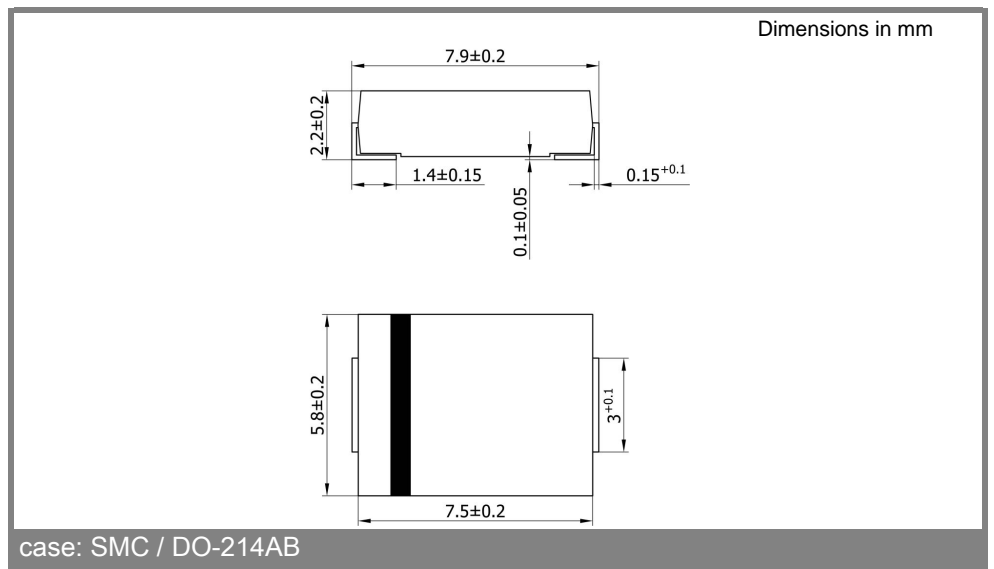
#### Mechanical Data

- Plastic case: SMC / DO-214AB
- Weight approx.: 0,21 g
- Terminals: plated terminals solderable per MIL-STD-750
- Mounting position: any
- Standard packaging: 3000 pieces per reel

- 1) Non-repetitive current pulse see curve IPPM = f(tr)
- 2) Mounted on P.C. board with 50 mm<sup>2</sup> copper pads at each terminal
- 3) Unidirectional diodes only

Absolute Maximum Ratings		T <sub>A</sub> = 25 °C, unless otherwise specified	
Symbol	Conditions	Values	Units
P <sub>PPM</sub>	Peak pulse power dissipation (10/1000 μs waveform), <sup>1)</sup> T <sub>a</sub> = 25 °C	1500	W
P <sub>M(AV)</sub>	Steady state power dissipation <sup>2)</sup> , T <sub>a</sub> = 25 °C	5	W
I <sub>FSM</sub>	Peak forward surge current, 60 Hz half sine-wave, <sup>3)</sup> T <sub>a</sub> = 25 °C	100	A
R <sub>thA</sub>	Max. thermal resistance junction to ambient <sup>2)</sup>	50	K/W
R <sub>thT</sub>	Max. thermal resistance junction to terminal	10	K/W
T <sub>j</sub>	Operating junction temperature	-50 ... +150	°C
T <sub>s</sub>	Storage temperature	-50 ... +150	°C
V <sub>f</sub>	Max. instant. forw. voltage I <sub>f</sub> = 25 A <sup>3)</sup>	<3,0	V
		-	V

Type	Stand-off voltage@I <sub>D</sub>		Breakdown voltage@I <sub>T</sub>		Test current I <sub>T</sub> mA	Max. clamping voltage@I <sub>PPM</sub>	
	V <sub>WM</sub> V	I <sub>D</sub> μA	min. V	max. V		V <sub>C</sub> V	I <sub>PPM</sub> A
1,5 SMCJ 160	160	5	178	217	1	287	5,2
1,5 SMCJ 160A	160	5	178	198	1	259	5,8
1,5 SMCJ 170	170	5	189	231	1	304	4,9
1,5 SMCJ 170A	170	5	189	210	1	275	5,5
1,5 SMCJ 180	180	5	209	255	1	344	4,4
1,5 SMCJ 180A	180	5	209	231	1	328	4,6



# 1,5 SMCJ 160 ... 1,5 SMCJ 180CA

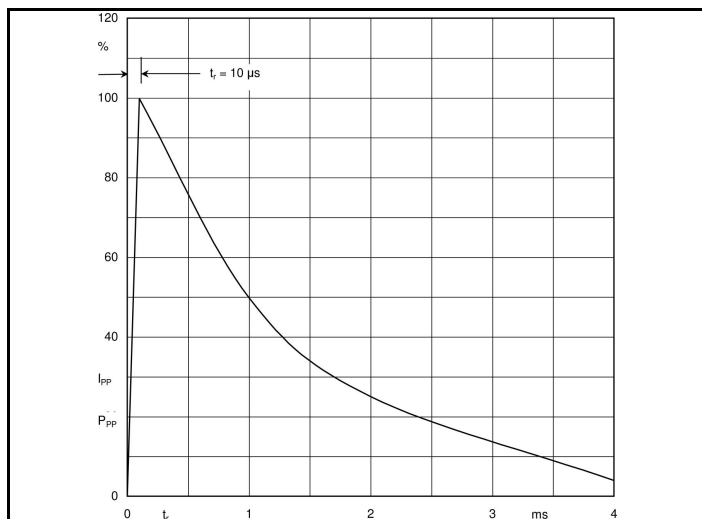


Fig. 1 10/1000  $\mu$ s - pulse waveform

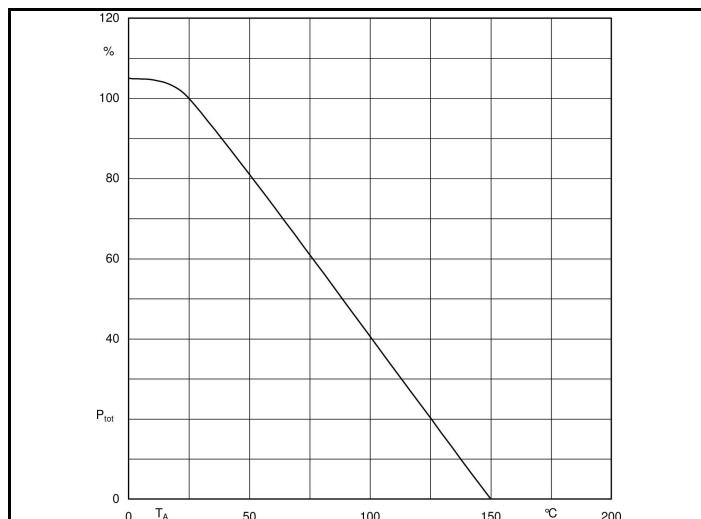


Fig. 2 Rated power dissipation vs. amb. temp. <sup>2)</sup>

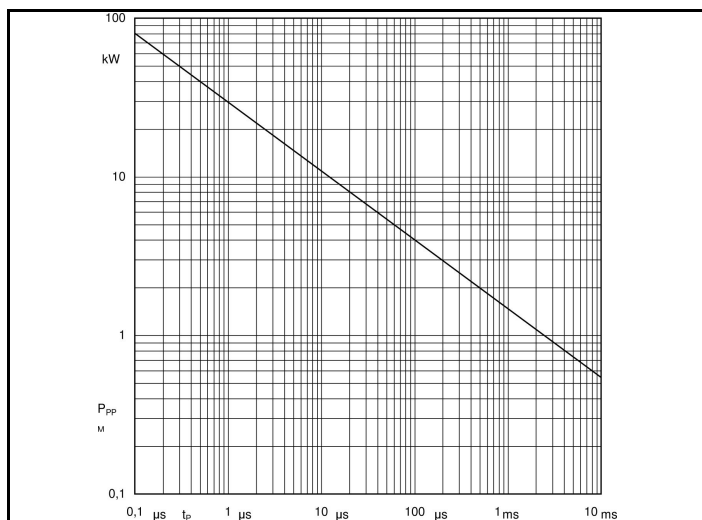


Fig. 3 Peak pulse power versus pulse duration