



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, Ca 90638
 Phone: (562) 404-4474 * Fax: (562) 404-1773
 ssdi@ssdi-power.com * www.ssdi-power.com

**SPD5415 thru SPD5420
 and
 SPD5415SMS thru SPD5420SMS**

ELECTRICAL CHARACTERISTICS ^{3/}

CHARACTERISTICS	SYMBOL	VALUE		UNIT
		MIN	MAX	
Forward Voltage $I_F = 1.5 \text{ Adc}$ $I_F = 9 \text{ Adc}, 300 \mu\text{s Pulse}$ $I_F = 0.5 \text{ Adc}, T_A = -55^\circ\text{C}$	V_{F1} V_{F2} V_{F3}	0.5 0.6 0.5	1.2 1.5 1.4	Vdc
Breakdown Voltage ($I_R = 50 \mu\text{Adc}$)	$V_{(BR)}$	55 110 220 440 550 660		Vdc
Maximum Reverse Leakage Current (Rated $V_R, T_A = 25^\circ\text{C}$) (SPD5415 thru 5417- Rated $V_R, T_A = 100^\circ\text{C}$) (SPD5418 thru 5420- Rated $V_R, T_A = 100^\circ\text{C}$)	I_{R1} I_{R2} I_{R3}		1.0 20 30	μA
Junction Capacitance ($V_R = 4 \text{ Vdc}, 100\text{KHz} \leq f \leq 1\text{MHz}$)	C_J		120	pF
Maximum Reverse Recovery Time ($I_F = 500\text{mA}, I_R = 1\text{A}, I_{RR} = 250\text{mA}$)	t_{rr}	SPD5415 thru SPD5418 SPD5419 SPD5420	150 250 400	ns

NOTES:

- 1/ For Ordering Information, Price, Operating Curves, and Availability- Contact Factory.
- 2/ Screened to MIL-PRF-19500.
- 3/ Unless Otherwise Specified, All Electrical Characteristics @25°C.
- 4/ These ratings are typical for PC boards where thermal resistance from mounting point to ambient is sufficiently controlled where $T_{J(MAX)}$ is not exceeded. For 3.0 Amps at $T_A = 55^\circ\text{C}$, derate linearly at 22 mA for $55^\circ\text{C} \leq T_A \leq 100^\circ\text{C}$. For 2.0 Amps at $T_A = 100^\circ\text{C}$, derate linearly at 25 mA for $100^\circ\text{C} \leq T_A \leq 175^\circ\text{C}$.

Package Outlines:

DIMENSIONS (inches)			DIMENSIONS (inches)		
DIM.	Minimum	Maximum	DIM	Minimum	Maximum
A	.140	.180	A	.170	.180
B	.190	.260	B	.240	.300
C	.037	.042	C	.023	.028
D	.90	1.30	D	.002	---

AXIAL

SMS