



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

DESIGNER'S DATA SHEET

Part Number / Ordering Information ^{1/}

SPD56

L Screening^{2/} = None
 TX = TX Level
 TXV = TXV Level
 S = S Level

 L Package
 — = Axial Leaded
 SMS = Surface Mount Square Tab

 L Voltage
 24 = 200 V
 25 = 400 V
 26 = 600 V
 27 = 800 V
 28 = 1000 V

SPD5624 - SPD5628 and SPD5624SMS - SPD5628SMS

3 AMP
200-1000 Volts
5 μsec

STANDARD RECOVERY RECTIFIER

Features:

- Fast Recovery: 5 μsec Max.
- PIV to 1000 Volts
- Low Reverse Leakage Current
- Hermetically Sealed
- Single Chip Construction
- High Surge Rating
- Low Thermal Resistance
- Available in Axial Leaded and Surface Mount Versions
- Available in Fast, Ultra Fast, and Hyper Fast Versions – Contact Factory
- Replacement for 1N5624-1N5628 and 1N5624US-1N5628US

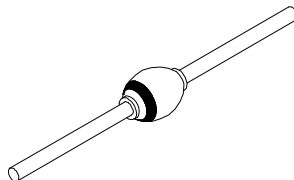
Maximum Ratings		Symbol	Value	Units
Peak Repetitive Reverse and DC Blocking Voltage	SPD5624 & SPD5624SMS	V_{RRM}	200	Volts
	SPD5625 & SPD5625SMS		400	
	SPD5626 & SPD5626SMS	V_{RWM}	600	
	SPD5627 & SPD5627SMS		800	
	SPD5628 & SPD5628SMS	V_R	1000	
Average Rectified Forward Current (Resistive Load, 60 Hz Sine Wave, $T_A = 25^\circ\text{C}$)		I_o	3	Amps
Repetitive Peak Surge Current (8.3 ms Pulse, Half Sine Wave Superimposed on I_o , Allow Junction to Reach Equilibrium Between Pulses, $T_A = 25^\circ\text{C}$)		I_{FSM}	125	Amps
Operating & Storage Temperature		Top & Tstg	-65 to +175	°C
Maximum Thermal Resistance Junction to Leads, $L = 3/8$ "		$R_{\theta JL}$	25	°C/W

Notes:

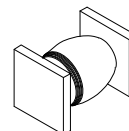
^{1/} For Ordering Information, Price, Operating Curves, and Availability – Contact Factory.

^{2/} Screening Based on MIL-PRF-19500. Screening Flows Available on Request.

Axial Leaded



SMS (Square)



NOTE: All specifications are subject to change without notification. SCD's for these devices should be reviewed by SSDI prior to release.

DATA SHEET #: R00019B

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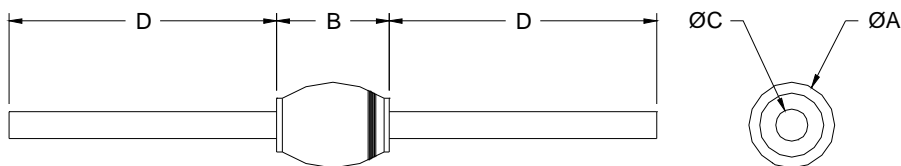
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**SPD5624 - SPD5628
and
SPD5624SMS - SPD5628SMS**

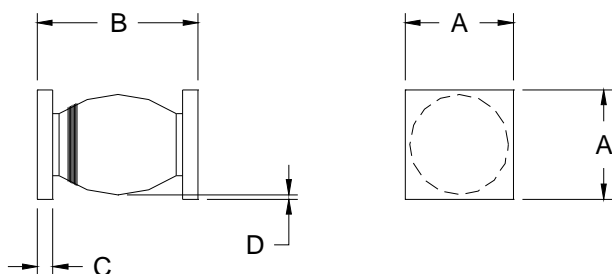
Electrical Characteristics	Symbol	Max	Units
Instantaneous Forward Voltage Drop ($I_F = 3 \text{ A dc}$, $T_A = 25^\circ\text{C}$, 300 μs pulse)	V_F	1.0	Vdc
Instantaneous Forward Voltage Drop ($I_F = 3 \text{ A dc}$, $T_A = -55^\circ\text{C}$, 300 μs pulse)	V_F	1.2	Vdc
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ\text{C}$, 300 μs pulse minimum)	I_R	2	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ\text{C}$, 300 μs pulse minimum)	I_R	200	μA
Junction Capacitance ($V_R = 10 \text{ Vdc}$, $T_A = 25^\circ\text{C}$, $f = 1\text{MHz}$)	C_J	40	pF
Reverse Recovery Time ($I_F = 500 \text{ mA}$, $I_R = 1\text{A}$, $I_{RR} = 0.25\text{A}$, $T_A = 25^\circ\text{C}$)	t_{rr}	5	μsec

Case Outline: (Axial)



DIMENSIONS		
DIM	MIN	MAX
A	---	.200"
B	---	.230"
C	.047"	.053"
D	1.00"	---

Case Outline: (SMS)



DIMENSIONS		
DIM	MIN	MAX
A	.172"	.180"
B	.180"	.280"
C	.022"	.028"
D	.002"	---

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