

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 SPD56_______ L Screening^{2/} = None TX = TX Level TXV = TXV Level S = S Level 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 SPD5625& SPD5625SMS SPD5626 & SPD5626SMS SPD5627 & SPD5627SMS SPD5628 & SPD5628SMS	$egin{aligned} \mathbf{V_{RRM}} \ \mathbf{V_{RWM}} \ \mathbf{V_{R}} \end{aligned}$	200 400 600 800 1000	Volts
Average Rectified Forward Current (Resistive Load, 60 Hz Sine Wave, T _A = 25°C)		Io	3	Amps
Repetitive Peak Surge Current (8.3 ms Pulse, Half Sine Wave Superimposed on Io, Allow Junction to Reach Equilibrium Between Pulses, T _A = 25°C)		$I_{ m FSM}$	125	Amps
Operating & Storage Temperature		Top & Tstg	-65 to +175	°C
Maximum Thermal Resistance Junction to Leads, $L = 3/8$ "		$\mathbf{R}_{ heta,\mathrm{JL}}$	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)



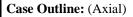


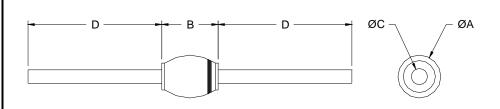
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SPD5624 - SPD5628 and SPD5624SMS - SPD5628SMS

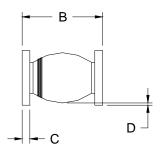
Electrical Characteristics	Symbol	Max	Units
Instantaneous Forward Voltage Drop (I _F = 3 Adc, T _A = 25°C, 300 µs pulse)	$\mathbf{V_F}$	1.0	Vdc
Instantaneous Forward Voltage Drop (I _F = 3 Adc, T _A = -55°C, 300 μs pulse)	$\mathbf{V_F}$	1.2	Vdc
Reverse Leakage Current (Rated V_R , $T_A = 25$ °C, 300 μ s pulse minimum)	I_R	2	μА
Reverse Leakage Current (Rated V_R , $T_A = 100^{\circ}$ C, 300 µs pulse minimum)	I_R	200	μА
Junction Capacitance (V _R = 10 Vdc, T _A = 25°C, f = 1MHz)	C_{J}	40	pF
Reverse Recovery Time $(I_F = 500 \text{ mA}, I_R = 1A, I_{RR} = 0.25A, T_A = 25^{\circ}C)$	t _{rr}	5	μsec

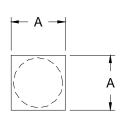




DIMENSIONS				
DIM	MIN	MAX		
A		.200"		
В		.230"		
C	.047"	.053"		
D	1.00"			

Case Outline: (SMS)





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