



**Solid State Devices, Inc.**

14701 Firestone Blvd \* La Mirada, Ca 90638  
 Phone: (562) 404-4474 \* Fax: (562) 404-1773  
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**SPD2520  
 thru  
 SPD2540**

**Designer's Data Sheet**

**Part Number / Ordering Information**<sup>1/</sup>

SPD 252 — —  
0

L **Screening**<sup>2/</sup>  
 TX = TX Level  
 TXV = TXV Level,  
 S = S-Level  
 — = Not Screened

L **Package**  
 — = Axial (DO-35)  
 SMS = Surface Mount Square Tab

**Voltage / Family**  
 2520 = 20V  
 2530 = 30V  
 2540 = 40V

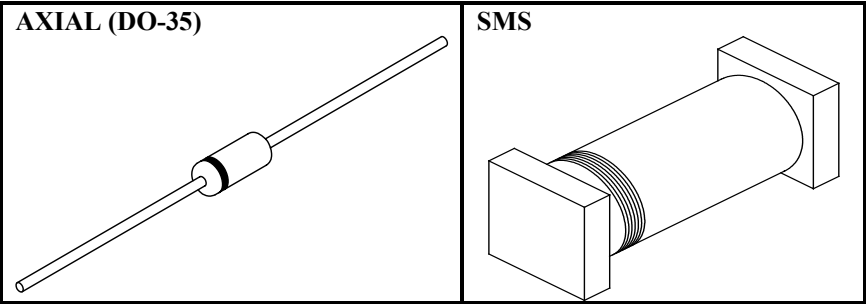
**0.5 AMP  
 20-40 VOLTS  
 SCHOTTKY RECTIFIER**

- FEATURES:**
- Extremely Low Forward Voltage Drop
  - High Surge Capability
  - Hermetically Sealed
  - Axial or Surface Mount Packages
  - TX, TXV, and Space Level Screening Available

MAXIMUM RATINGS		Symbol	Value	Units
Peak Repetitive Reverse Voltage and DC Blocking Voltage	SPD2520	$V_{RRM}$	20	Volts
	SPD2530	$V_{RWM}$	30	
	SPD2540	$V_R$	40	
Average Rectified Forward Current (Resistive Load, 60 Hz, Sine Wave, $T_A=25^\circ C$ )		$I_O$	0.5	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave Superimposed on $I_O$ , allow junction to reach equilibrium between pulses, $T_A=25^\circ C$ )		$I_{FSM}$	10	Amps
Operating and Storage Temperature		$T_{OP} \& T_{stg}$	-65 to +150	$^\circ C$
Maximum Thermal Resistance Junction to Lead, $L = 3/8''$		$R_{\theta JL}$	190	$^\circ C/W$

**NOTES:**

- 1/ For ordering information, price, and availability, contact factory.  
2/ Screening per MIL-PRF-19500.





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ELECTRICAL CHARACTERISTICS		Symbol	Max	Unit
<b>Instantaneous Forward Voltage Drop</b> ( $I_F = 1A_{DC}$ , $T_A = 25^\circ C$ , 300-500 $\mu s$ Pulse)	$I_F = 100mA_{DC}$	$V_{F1}$	0.5	Volts
	$I_F = 500mA_{DC}$	$V_{F2}$	0.75	
<b>Reverse Leakage Current</b> (Rated $V_R$ , $T_A = 25^\circ C$ , 300 $\mu s$ minimum Pulse)		$I_{R1}$	5	$\mu A$
<b>Reverse Leakage Current</b> (Rated $V_R$ , $T_A = 100^\circ C$ , 300 $\mu s$ minimum Pulse)		$I_{R2}$	1	mA
<b>Junction Capacitance</b> ( $V_R = 10 V_{DC}$ , $T_A = 25^\circ C$ , $f = 1 MHz$ )		$C_J$	10	pF

AXIAL CASE OUTLINE: (DO-35)	DIMENSIONS		
	CODE	MIN.	MAX.
	<b>A</b>	.060"	.080"
	<b>B</b>	.140"	.160"
	<b>C</b>	1.00"	---
	<b>D</b>	.018"	.022"
	<p><b>Note:</b> Lead diameter is not controlled within 0.050" of the diode body.</p>		

SMS CASE OUTLINE:	DIMENSIONS		
	CODE	MIN.	MAX.
	<b>A</b>	.092"	.098"
	<b>B</b>	.190"	.215"
	<b>C</b>	.022"	.028"
	<b>D</b>	.002"	---
	<p><b>Note:</b> Dimensions prior to solder dipping.</p>		