

## Solid State Devices, Inc.

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> 2530 = 30V2540 = 40V

SPD2520 thru SPD2540

## **Designer's Data Sheet**

0.5 AMP 20-40 VOLTS SCHOTTKY RECTIFIER

## **FEATURES:**

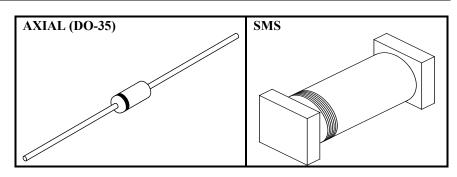
- Extremely Low Forward Voltage Drop
- High Surge Capability
- Hermetically Sealed
- Axial or Surface Mount Packages
- TX, TXV, and Space Level Screening Available

MAXIMUM RATINGS		Symbol	Value	Units
Peak Repetitive Reverse Voltage and DC Blocking Voltage	SPD2520 SPD2530 SPD2540	$egin{array}{c} V_{RRM} \ V_{RWM} \ V_{R} \end{array}$	20 30 40	Volts
<b>Average Rectified Forward Current</b> (Resistive Load, 60 Hz, Sine Wave, T <sub>A</sub> =25 °C)		Io	0.5	Amps
<b>Peak Surge Current</b> (8.3 ms Pulse, Half Sine Wave Superimposed on I <sub>O</sub> , allow junction to reach equilibrium between pulses, T <sub>A</sub> =25 °C)		$I_{FSM}$	10	Amps
Operating and Storage Temperature		T <sub>OP</sub> & Tstg	-65 to +150	°C
Maximum Thermal Resistance Junction to Lead, $L = 3/8$ "		$R_{ heta JL}$	190	°C/W

## **NOTES:**

1/ For ordering information, price, and availability, contact factory.

2/ Screening per MIL-PRF-19500.



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

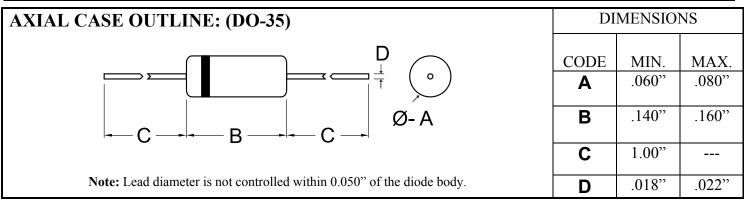
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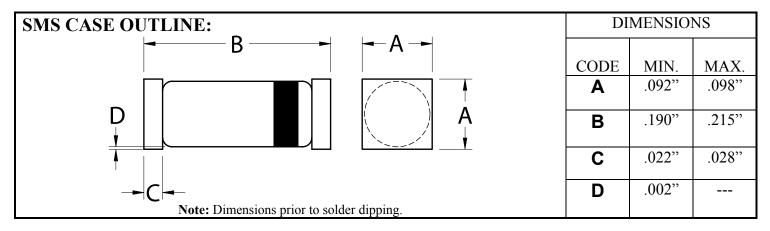
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SPD2520 thru SPD2540

ELECTRICAL CHARACTERISTICS		Symbol	Max	Unit
Instantaneous Forward Voltage Drop $(I_F = 1A_{DC}, T_A = 25^{\circ}C, 300-500 \mu s Pulse)$	$\begin{split} I_F &= 100 \text{mA}_{DC} \\ I_F &= 500 \text{mA}_{DC} \end{split}$	$egin{array}{c} V_{F1} \ V_{F2} \end{array}$	0.5 0.75	Volts
Reverse Leakage Current (Rated $V_R$ , $T_A = 25^{\circ}C$ , 300 $\mu$ s minimum Pulse)		$I_{R1}$	5	μА
Reverse Leakage Current (Rated V <sub>R</sub> , T <sub>A</sub> = 100 °C, 300 μs minimum Pulse)		$I_{R2}$	1	mA
<b>Junction Capacitance</b> (V <sub>R</sub> = 10 V <sub>DC</sub> , T <sub>A</sub> = 25 °C, f = 1 MHz)		C <sub>J</sub>	10	pF





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