

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/ SSR 03 40 \_\_\_\_\_ Screening2/ \_\_\_\_ = Not Screened TX = TX Level TXV = TXV Level S = S Level Package S.22 = SMD.22 /5 = TO-5 Voltage 40 = 40V Current 03 = 3A

# **SSR0340**

# 3 AMP SCHOTTKY SMD Rectifier

**40 VOLTS** 

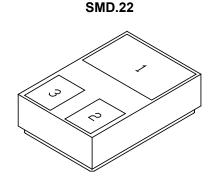
### **FEATURES:**

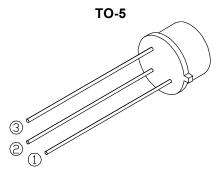
- Low Forward Voltage Drop: 0.48V
- Hermetically Sealed Surface Mount Package
- Guard Ring for Overvoltage Protection
- 3 Amp Replacement for 1N5817, 1N5818, and 1N5819
- Higher Voltages Available Contact Factory
- TX, TXV, and Space Level Screening Available - Contact Factory.

MAXIMUM RATINGS	Symbol	Value	Units
Peak Repetitive Reverse Voltage and DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	40	Volts
Average Rectified Forward Current (Resistive Load, 60 Hz, Sine Wave, T <sub>A</sub> = 100°C)	Io	3	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 <sub>FSM</sub>	60	Amps
Operating and Storage Temperature	T <sub>OP</sub> & T <sub>stg</sub>	-55 to +150	°C
Maximum Thermal Resistance Junction to Case	R <sub>θJC</sub>	15	°C/W

### Notes:

- $\underline{1}/$  For ordering information, price, operating curves and availability contact factory.
- 2/ Screening based on MIL-PRF-19500. Screening flows available on request.







### Solid State Devices, Inc.

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# **SSR0340**

ELECTRICAL CHARACTERISTICS		Symbol	Value	Unit
Instantaneous Forward Voltage Drop (T <sub>A</sub> = 25°C, 300 μsec Pulse)	$I_F = 1 A_{DC}$ $I_F = 2 A_{DC}$ $I_F = 3 A_{DC}$	V <sub>F1</sub> V <sub>F2</sub> V <sub>F3</sub>	0.48 0.58 0.71	V <sub>DC</sub>
Instantaneous Forward Voltage Drop (T <sub>A</sub> = -55°C, 300 μsec Pulse)	$I_F = 1 A_{DC}$ $I_F = 2 A_{DC}$ $I_F = 3 A_{DC}$	V <sub>F4</sub> V <sub>F5</sub> V <sub>F6</sub>	0.56 0.64 0.74	V <sub>DC</sub>
Instantaneous Forward Voltage Drop (T <sub>A</sub> = +100°C, 300 μsec Pulse)	$I_F = 1 A_{DC}$ $I_F = 2 A_{DC}$ $I_F = 3 A_{DC}$	V <sub>F7</sub> V <sub>F8</sub> V <sub>F9</sub>	0.40 0.53 0.66	V <sub>DC</sub>
Reverse Leakage Current (Rated V <sub>R</sub> , 300 μsec pulse minimum)	$T_A = 25^{\circ}C$ $T_A = +100^{\circ}C$	I <sub>R1</sub> I <sub>R2</sub>	0.1 10	mA
Junction Capacitance $(V_R = 5V_{DC}, T_A = 25^{\circ}C, f = 1 \text{ MHz})$		CJ	300	рF

