



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, Ca 90638
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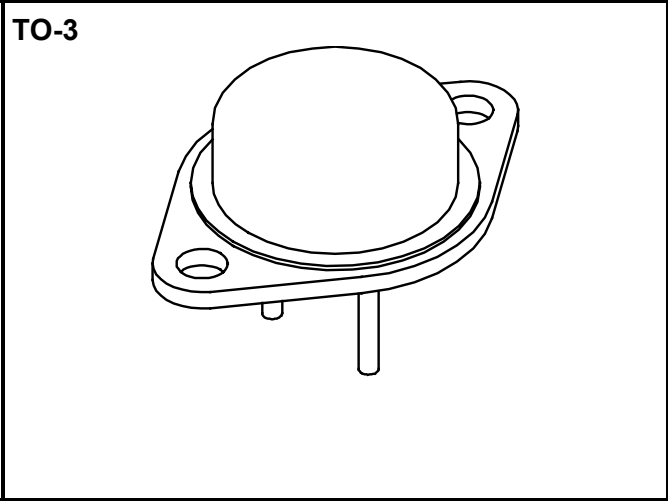
SSR4010/3

Designer's Data Sheet

FEATURES:

- PIV: 100 Volts
- Low Forward Voltage Drop
- Low Reverse Leakage
- Hermetically Sealed Package
- Guard Ring for Overvoltage Protection
- Available in Isolated and Non-isolated versions
- Eutectic Die Attach
- 175°C Operating Junction Temperature
- TX, TXV, and Space Level Screening Available

**40 AMPS
100 VOLTS
SCHOTTKY
RECTIFIER**



MAXIMUM RATINGS		Symbol	Value	Units
Peak Repetitive Reverse Voltage and DC Blocking Voltage	SSR4010/3	V_{RRM} V_{RWM} V_R	100	Volts
Average Rectified Forward Current ^{1/} (Resistive Load, 60 Hz, Sine Wave, T _A =25°C)		I_O	40	Amps
Peak Surge Current ^{1/} (8.3 ms Pulse, Half Sine Wave Superimposed on I _O , allow junction to reach equilibrium between pulses, T _A =25°C)		I_{FSM}	400	Amps
Operating and Storage Temperature		T _{OP} & T _{stg}	-65 to +175	°C
Maximum Thermal Resistance ^{1/} Junction to Case		R _{θJC}	0.6	°C/W

Notes:

^{1/} Both Legs Tied Together.



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ELECTRICAL CHARACTERISTICS	Symbol	Max	Unit
Instantaneous Forward Voltage Drop ($T_A = 25^\circ\text{C}$, Pulse)	$I_F = 10$ Amps $I_F = 20$ Amps $I_F = 40$ Amps	V_{F1} V_{F2} V_{F3}	0.7 0.77 0.90 Volts
Instantaneous Forward Voltage Drop ($I_F = 20$ Amps, $T_A = -55^\circ\text{C}$, Pulse)		V_{F4}	0.89 Volts
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ\text{C}$, Pulse)		I_{R1}	400 μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ\text{C}$, Pulse)		I_{R2}	20 mA
Junction Capacitance ($V_R = 10$ V _{DC} , $T_A = 25^\circ\text{C}$, $f = 1$ MHz)		C_J	1,600 pF

