



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 ^{1/}

SSR4010

Screening ^{2/}

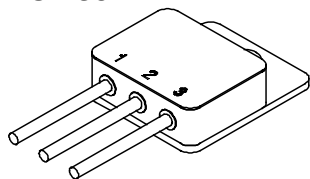
— = Not Screened
TX = TX Level
TXV = TXV
S = S Level

Lead Options — = Straight Leads,
D = Bent Down, U = Bent Up

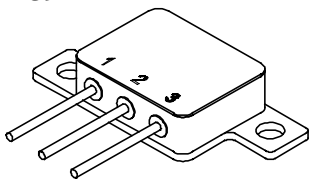
Package

N = TO-258, P = TO-259 (.060" Dia. Leads)
NA = TO-258, PA = TO-259 (.040" Dia. Leads)

TO-258



TO-259



**SSR4010N
SSR4010P**

**40 AMP
100 VOLTS
SCHOTTKY RECTIFIER**

FEATURES:

- PIV 100 Volts
- Low Forward Voltage Drop
- Low Reverse Leakage Current
- Isolated Hermetically Sealed Power Package
- Available with Ceramic Seals
- Custom Lead Forming Available
- Guard Ring for Overvoltage Protection
- Eutectic Die Attach
- 175°C Operating Junction Temperature
- TX, TXV, or Space Level Screening Available

MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse Voltage and DC Blocking Voltage SSR4010N, SSR4010P	V_{RRM} V_{RWM} V_R	100	Volts
Average Rectified Output Current ^{3/} (Resistive Load, 60Hz, Sine Wave, TA=25°C)	I_O	40	Amps
Peak Surge Current ^{3/} (8.3 ms Pulse, Half Sine Wave, superimposed on I_O , allow junction to reach equilibrium between pulses, TA=25°C)	I_{FSM}	400	Amps
Operating and Storage Temperature	T_{OP} & T_{STG}	-65 to +175	°C
Maximum Thermal Resistance ^{3/} Junction to Case	$R_{\theta JC}$	0.6	°C/W

NOTES: ^{1/} For ordering information, price, and availability- Contact Factory.

^{2/} Screened to MIL-PRF-19500.

^{3/} Pins 2 and 3 connected together.

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

DATA SHEET #: RS0105C

DOC



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SSR4010N
SSR4010P

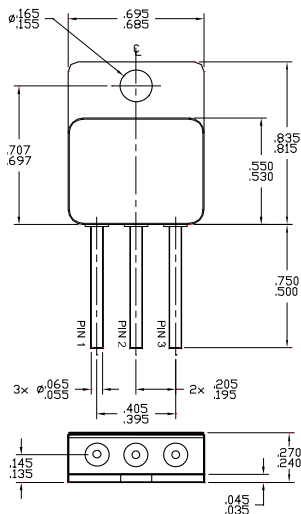
ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop ($I_F = 10\text{ A}$, $T_A = 25^\circ\text{C}$, Pulse)	V_{F1}	0.7	Vdc
($I_F = 20\text{ A}$, $T_A = 25^\circ\text{C}$, Pulse)	V_{F2}	0.77	
($I_F = 40\text{ A}$, $T_A = 25^\circ\text{C}$, Pulse)	V_{F3}	0.90	
Instantaneous Forward Voltage Drop ($I_F = 20\text{ A}$, $T_A = -55^\circ\text{C}$, Pulse)	V_{F4}	0.89	Vdc
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 ($V_R = 10\text{ V}$, $T_A = 25^\circ\text{C}$, $f = 1\text{ MHz}$)	C_J	1,600	pF

Case Outlines-

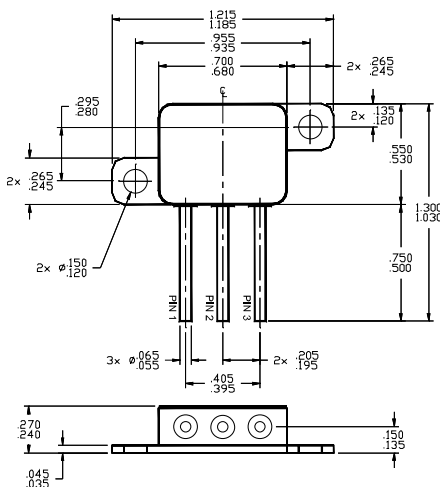
TO-258 (N Suffix)

PIN OUT:
PIN 1- CATHODE
PIN 2- ANODE
PIN 3- ANODE

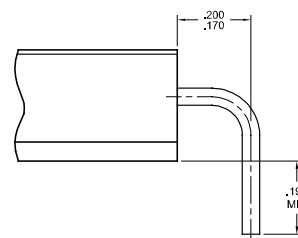


TO-259 (P Suffix)

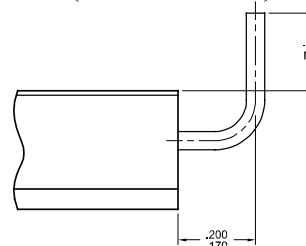
PIN OUT:
PIN 1- CATHODE
PIN 2- ANODE
PIN 3- ANODE



Optional Bent Down Leads (ND & PD Suffix)



Optional with Bent Up Leads (NU & PU Suffix)



For information on curves, contact the Factory Representative for Engineering Assistance.