



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, Ca 90638
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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 NA = TO-258 w/ .040" Dia. Legs

PA = TO-259 w/ .040" Dia. Legs

N = TO-258 w/ .060" Dia. Legs

P = TO-259 w/ .060" Dia. Legs

Configuration CT = Common Cathode,
 CA = Common Anode, D = Doubler,
 DR = Reverse Doubler

SSR4010CTNA
SSR4010CTPA

40 AMP, 100 VOLTS
SCHOTTKY RECTIFIER

FEATURES:

- PIV 100 Volts
- Low Forward Voltage Drop
- Low Reverse Leakage Current
- Isolated Hermetically Sealed Power Package
- Ceramic Seal Package Available
- Custom Lead Forming Available
- Guard Ring for Overvoltage Protection
- Gold 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 SSR4010CTNA, SSR4010CTPA	V_{RRM} V_{RWM} V_R	100	Volts
Average Rectified Output Current ^{3/ 4/} (Resistive Load, 60Hz, Sine Wave, TA=25°C)	I_O	40	Amps
Peak Surge Current ^{3/ 4/} (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 Junction to Case ^{3/} Junction to Case (Per Leg)	$R_{\theta JC}$	0.6 1.2	°C/W

NOTES:

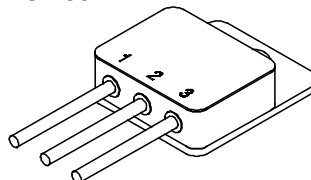
^{1/} For ordering information, price, and availability- Contact Factory

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

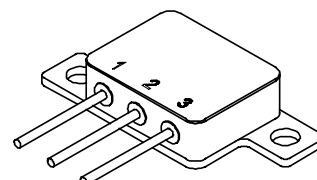
^{3/} Both Legs Tied Together.

^{4/} Doubler: $I_O = 20A$, $I_{FSM} = 200A$.

TO-258



TO-259



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

DATA SHEET #: RS0099F

DOC



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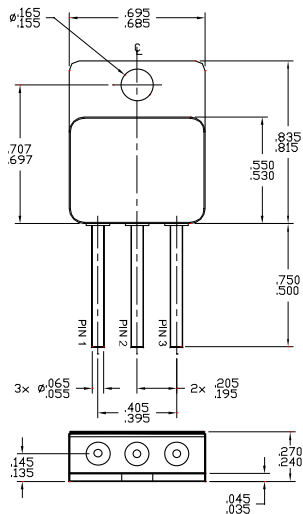
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SSR4010CTNA SSR4010CTPA

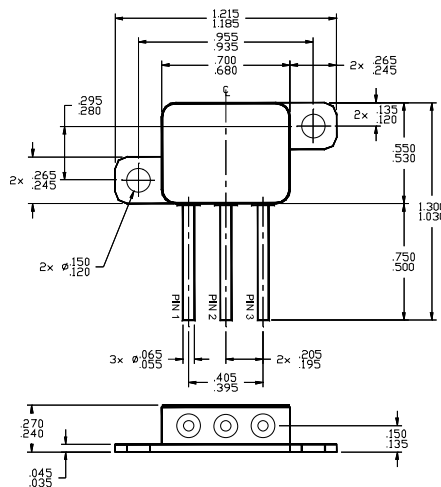
ELECTRICAL CHARACTERISTICS (Per Leg)

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop ($I_F = 10\text{ A}$, $T_A = 25^\circ\text{C}$, Pulse) ($I_F = 15\text{ A}$, $T_A = 25^\circ\text{C}$, Pulse) ($I_F = 20\text{ A}$, $T_A = 25^\circ\text{C}$, Pulse)	V_{F1} V_{F2} V_{F3}	0.75 0.82 0.85	Vdc
Instantaneous Forward Voltage Drop ($I_F = 10\text{ A}$, $T_A = -55^\circ\text{C}$, Pulse)	V_{F4}	0.84	Vdc
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ\text{C}$, Pulse)	I_{R1}	200	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ\text{C}$, Pulse)	I_{R2}	10	mA
Junction Capacitance ($V_R = 10\text{ V}$, $T_A = 25^\circ\text{C}$, $f = 1\text{ MHz}$)	C_J	800	pF

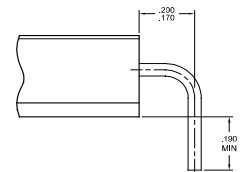
TO-258 (N Suffix)



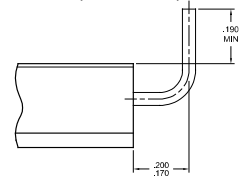
TO-259 (P Suffix)



Optional Bent Down Leads (D Suffix)



Optional with Bent Up Leads (U Suffix)



Pin Assignment

Code	Function	Pin 1	Pin 2	Pin 3
CT	Common Cathode	Anode	Cathode	Anode
CA	Common Anode	Cathode	Anode	Cathode
D	Doubler	Cathode	Common	Anode
DR	Reverse Doubler	Anode	Common	Cathode

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