



Solid State Devices, Inc.

14830 Valley View Blvd * La Mirada, Ca 90638

Phone: (562) 404-7855 * Fax: (562) 404-1773

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SSR4045CTJ Series

30A 45 V SCHOTTKY CENTERTAP RECTIFIER

DESIGNER'S DATA SHEET

Part Number / Ordering Information ^{1/}

SSR4045 CT J UB TX

Screening ^{2/} = Not Screened
TX = TX Level
TXV = TXV Level
S = S Level

Lead Bending: ^{3/} = Straight
UB = Up Bend
DB = Down Bend

Package: ^{3/} J = TO-257

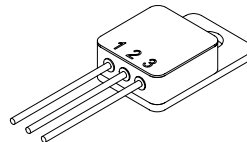
Configuration: CT = Common Cathode
CA = Common Anode
D = Doubler
DR = Doubler Reverse

Features:

- Low Reverse Leakage
- Low Forward Voltage Drop
- Guard Ring for Overload Protection
- Available with Ceramic Seals
- Custom Lead Forming Available
- Eutectic Die Attach
- 175°C Operating Temperature
- Hermetically Sealed Package
- TX, TXV, and S Level Screening Available

Maximum Ratings	Symbol	Value	Units
Peak Repetitive Reverse and DC Blocking Voltage	V_{RRM} V_{RSM} V_R	45	Volts
Average Rectified Forward Current ^{4/} (Resistive Load, 60 Hz Sine Wave, $T_A = 25^\circ\text{C}$)	I_O	30	Amps
Peak Surge Current ^{4/} (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ\text{C}$)	I_{FSM}	500	Amps
Operating & Storage Temperature	T_{OP} & T_{STG}	-65 to +175	°C
Maximum Thermal Resistance Junction to Case	Total Per Leg $R_{\theta JE}$	0.9 1.8	°C/W

TO-257 (J)



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

DATA SHEET #: RS0027C

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**SSR4045CTJ
Series**

Electrical Characteristic ^{5/}		Symbol	Min	Max	Units
Instantaneous Forward Voltage Drop (T _A = 25°C, 300 – 500usec Pulse)	I _F = 5A	V _{F1}	—	0.52	V _{DC}
	I _F = 10A	V _{F2}	—	0.64	
	I _F = 15A	V _{F3}	—	0.75	
Instantaneous Forward Voltage Drop (T _A = -55°C, 300 – 500usec Pulse)	I _F = 10A	V _{F4}	—	0.72	V _{DC}
Reverse Leakage Current (100% of rated V _R , 300μs pulse min.)	T _A = 25°C	I _{R1}	—	200	μA
	T _A = 100°C	I _{R2}	—	15	mA
Junction Capacitance (V _R =10V _{DC} , T _A =25°C, f=1MHz)		C _J	—	800	pF

NOTES:

1/ For Ordering Information, Price, and Availability Contact Factory.

2/ Screening per MIL-PRF-19500.

3/ For Package Outlines Contact Factory.

4/ Maximum Electrical Rating Shown for Centertap Configurations both Legs Tied Together.
 For Doubler Configurations: I_O = 15A, I_{FSM} = 250A.

5/ All Electrical Characteristics per Leg @25°C, Unless Otherwise Specified.

Available Part Numbers:			PIN ASSIGNMENT			
			CONFIGURATION	Pin 1	Pin 2	Pin 3
SSR4045CTJ	SSR4045CTJUB	SSR4045CTJDB	Common Cathode (CT)	Anode	Cathode	Anode
SSR4045CAJ	SSR4045CAJUB	SSR4045CAJDB	Common Anode (CA)	Cathode	Anode	Cathode
SSR4045DJ	SSR4045DJUB	SSR4045DJDB	Doubler (D)	Cathode	AC	Anode
SSR4045DRJ	SSR4045DRJUB	SSR4045DRJDB	Doubler Reverse (DR)	Anode	AC	Cathode