



Solid State Devices, Inc.

14830 Valley View Blvd * La Mirada, Ca 90638
 Phone: (562) 404-7855 * Fax: (562) 404-1773
 ssdi@ssdi-power.com * www.ssdi-power.com

**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

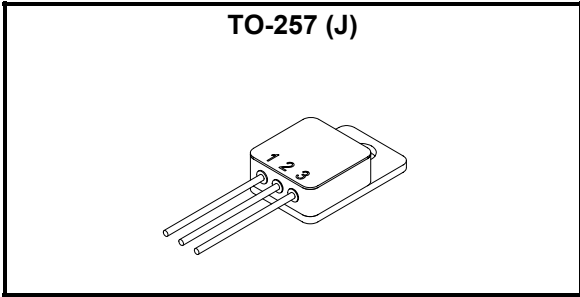
Lead Bending: ^{3/}
 = Straight
 UB = Up Bend
 DB = Down Bend

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, $T_A = 25^\circ C$)	I_O	30	Amps
Peak Surge Current ^{4/} (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ C$)	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



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

DOC



Solid State Devices, Inc.

14830 Valley View Blvd * La Mirada, Ca 90638
Phone: (562) 404-7855 * Fax: (562) 404-1773
ssdi@ssdi-power.com * www.ssdi-power.com

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:

SSR4045CTJ	SSR4045CTJUB	SSR4045CTJDB
SSR4045CAJ	SSR4045CAJUB	SSR4045CAJDB
SSR4045DJ	SSR4045DJUB	SSR4045DJDB
SSR4045DRJ	SSR4045DRJUB	SSR4045DRJDB

PIN ASSIGNMENT

CONFIGURATION	Pin 1	Pin 2	Pin 3
Common Cathode (CT)	Anode	Cathode	Anode
Common Anode (CA)	Cathode	Anode	Cathode
Doubler (D)	Cathode	AC	Anode
Doubler Reverse (DR)	Anode	AC	Cathode