



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

SSR8045CTS1 and SSR8045CTS2 Series

80 Amp SCHOTTKY CENTERTAP RECTIFIER 45 Volts

- Features:**
- Low Reverse Leakage
 - Low Forward Voltage Drop
 - Guard Ring for Overload Protection
 - Also available in TO-258 and TO-259 Versions
 - 175°C Operating Temperature
 - TX, TXV, and S Level Screening Available

DESIGNER'S DATA SHEET

Part Number / Ordering Information ^{1/}

SSR8045CT S1 TX

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

Package: S1 = SMD1
 S2 = SMD2

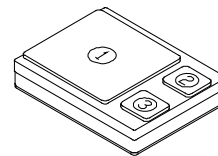
Configuration: CT = Common Cathode

Maximum Ratings	Symbol	Value	Units
Peak Repetitive Reverse and DC Blocking Voltage	V_{RRM} V_{RSM} V_R	45	Volts
Average Rectified Forward Current ^{3/} (Resistive Load, 60 Hz Sine Wave, $T_A = 25^\circ\text{C}$)	I_o	80	Amps
Peak Surge Current ^{3/} (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ\text{C}$)	I_{FSM}	1200	Amps
Operating & Storage Temperature	T_{OP} & T_{STG}	-65 to +175	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case	Total Per Leg $R_{\theta JE}$	0.5 1.0	$^\circ\text{C/W}$

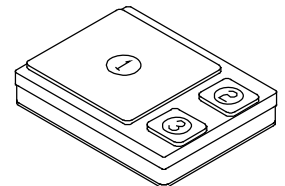
Notes:

- ^{1/} For ordering information, price, operating curves, and availability - Contact factory.
^{2/} Screening based on MIL-PRF-19500. Screening flows available on request.
^{3/} Maximum electrical rating shown for centertap configurations both legs tied together.
^{4/} All electrical characteristics per leg @25°C, unless otherwise specified.

SMD1 (S1)



SMD2 (S2)





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Electrical Characteristic ⁴¹		Symbol	Min	Max	Units
Instantaneous Forward Voltage Drop (T _A = 25°C, 300 – 500usec Pulse)	I _F = 10A	V_{F1}	—	0.53	V _{DC}
	I _F = 20A	V_{F2}	—	0.65	
	I _F = 40A	V_{F3}	—	0.90	
Instantaneous Forward Voltage Drop (T _A = -55°C, 300 – 500usec Pulse)	I _F = 20A	V_{F4}	—	0.72	V _{DC}
Reverse Leakage Current (100% of rated V _R , 300μs pulse min.)	T _A = 25°C	I_{R1}	—	400	μA
	T _A = 100°C	I_{R2}	—	30	mA
Junction Capacitance (V _R =10V _{DC} , T _A =25°C, f=1MHz)		C_J	—	1600	pF

<p>SMD1 Outline:</p>	<p>SMD2 Outline:</p>												
<p>Available Part Numbers: SSR8045CTS1, SSR8045CTS2</p>	<p>PIN ASSIGNMENT:</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="padding: 2px;">SMD1</th> <th style="padding: 2px;">Pin 2</th> <th style="padding: 2px;">Pin 1</th> <th style="padding: 2px;">Pin 3</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;">SMD2</td> <td style="padding: 2px;">Pin 2</td> <td style="padding: 2px;">Pin 1</td> <td style="padding: 2px;">Pin 3</td> </tr> <tr> <td style="padding: 2px;">Common Cathode (CT)</td> <td style="padding: 2px;">Anode</td> <td style="padding: 2px;">Cathode</td> <td style="padding: 2px;">Anode</td> </tr> </tbody> </table>	SMD1	Pin 2	Pin 1	Pin 3	SMD2	Pin 2	Pin 1	Pin 3	Common Cathode (CT)	Anode	Cathode	Anode
SMD1	Pin 2	Pin 1	Pin 3										
SMD2	Pin 2	Pin 1	Pin 3										
Common Cathode (CT)	Anode	Cathode	Anode										