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

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

80 Amp SCHOTTKY CENTERTAP RECTIFIER 45 Volts

Features:

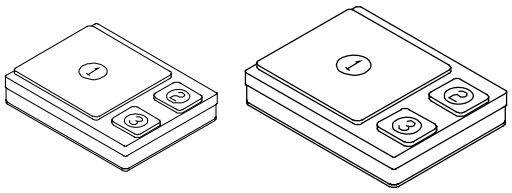
- **Low Reverse Leakage**
- **Low Forward Voltage Drop**
- **Guard Ring for Overload Protection**
- **Also available in TO-258 and TO-259 Versions**
- **175ºC Operating Temperature**
- **TX, TXV, and S Level Screening Available**

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

SMD1 (S1) **SMD2 (S2)**

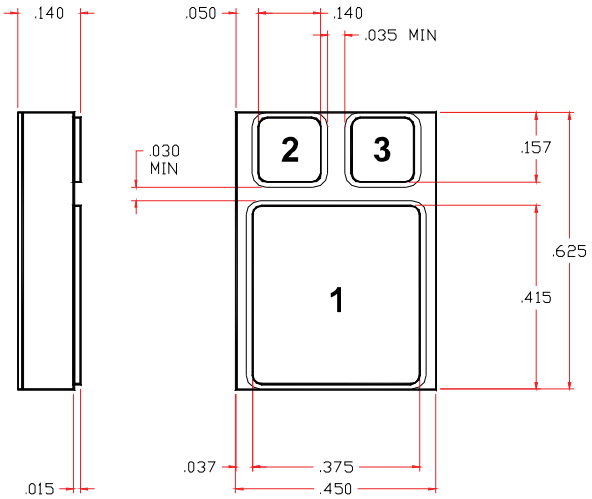


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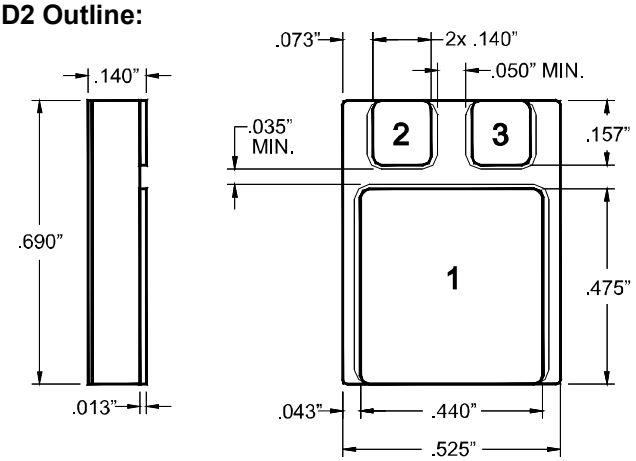
SSR8045CTS1 and SSR8045CTS2 Series

Electrical Characteristic [4/]		Symbol	Min	Max	Units
Instantaneous Forward Voltage Drop (T_A = 25ºC, 300 – 500usec Pulse)	I_F = 10A I_F = 20A I_F = 40A	V_{F1} V_{F2} V_{F3}	— — —	0.53 0.65 0.90	V_{DC}
Instantaneous Forward Voltage Drop (T_A = -55ºC, 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 = 25ºC T_A = 100ºC	I_{R1} I_{R2}	— —	400 30	µA mA
Junction Capacitance (V_R=10V_{DC}, T_A=25ºC, f=1MHz)		C_J	—	1600	pF

SMD1 Outline:



SMD2 Outline:



Available Part Numbers:

SSR8045CTS1, SSR8045CTS2

PIN ASSIGNMENT:

SMD1	Pin 2	Pin 1	Pin 3
SMD2	**Pin 2**	**Pin 1**	**Pin 3**
Common Cathode (CT)	Anode	Cathode	Anode