



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

**SSR8045CTP
Series**

**80A 45 V
SCHOTTKY
CENTERTAP RECTIFIER**

DESIGNER'S DATA SHEET

Part Number / Ordering Information ^{1/}

SSR8045 CT PA UB TX

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

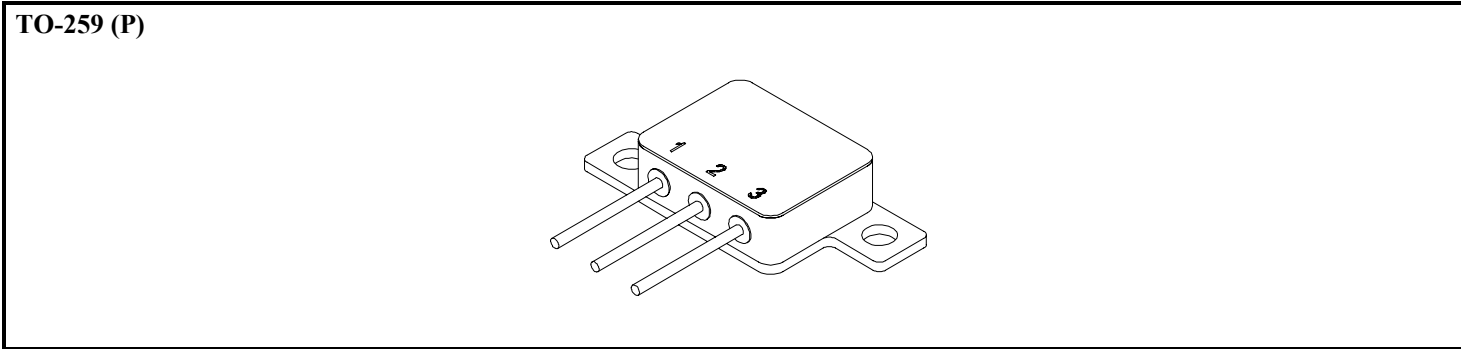
L **Lead Bending:** ^{3/}
 = Straight
 UB = Up Bend
 DB = Down Bend

L **Package:** ^{3/} P = TO-259, 60 mil pin
 PA = TO-259, 40 mil pin

L **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
 - Isolated Hermetically Sealed Power Package
 - Available with Ceramic Seals w/ 40 mil pin
 - Custom Lead Forming Available
 - Eutectic Die Attach
 - 175°C 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 ^{4/} (Resistive Load, 60 Hz Sine Wave, T _A = 25 °C)	I _O	80	Amps
Peak Surge Current ^{4/} (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	°C
Maximum Thermal Resistance Junction to Case	Total Per Leg $R_{\theta JE}$	0.5 1.0	°C/W





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Electrical Characteristic ^{1/}		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}	—	0.70	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

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 = 40A, I_{FSM} = 600A.

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

Available Part Numbers:			PIN ASSIGNMENT			
SSR8045CTP	SSR8045CTPUB	SSR8045CTPDB	CONFIGURATION	Pin 1	Pin 2	Pin 3
SSR8045CAP	SSR8045CAPUB	SSR8045CAPDB	Common Cathode (CT)	Anode	Cathode	Anode
SSR8045DP	SSR8045DPUB	SSR8045DPDB	Common Anode (CA)	Cathode	Anode	Cathode
SSR8045DRP	SSR8045DRPUB	SSR8045DRPDB	Doubler (D)	Cathode	Common	Anode
			Doubler Reverse (DR)	Anode	Common	Cathode