SOLID STATE DEVICES, INC.
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SSR8045CT/3

Designer's Data Sheet

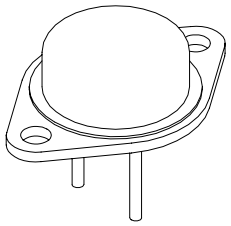
80AMPS 45 VOLTS POSITIVE CENTERTAP SCHOTTKY RECTIFIER

FEATURES:

- **Low Forward Voltage Drop**
- **Low Reverse Leakage**
- **Hermetically Sealed Power Surface Mount Package**
- **Guard Ring for Overvoltage Protection**
- **Eutectic Die Attach**
- **175°C Operating Junction Temperature**

- **TX, TXV and Space Level Screening Available**

TO-3



Available in Following Configurations:

SSR8045/3 - Rectifier (See Data Sheet RS0047)
SSR8045CT/3 - Common Cathode
SSR8045CA/3 - Common Anode
SSR8045D/3 - Doubler

Maximum Ratings	SYMBOL	VALUE	UNITS
Peak Repetitive Reverse and DC Blocking Voltage	V_{RRM} V_{RWM} V_R	45	Volts
Average Rectified Forward Current. (Resistive load, 60Hz, Sine Wave, T_A =25°C) 1/	Io	80	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave Superimposed on Io, allow junction to reach equilibrium between pulses, T_A = 25°C) 1/	I_{FSM}	600	Amps
Operating and Storage Temperature	T_{OP} & Tstg	-65 TO +175	°C
Maximum Thermal Resistance Junction to Case 1/	$R_{\theta JC}$	0.7	°C/W

NOTES:

1/ Both Legs Tied Together. For Doubler configuration ratings shall be: Io = 40A per Leg and I_{FSM} = 300A per Leg.

All Electrical Characteristics @25°C, Unless Otherwise Specified.

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

DATA SHEET #: RS0061B

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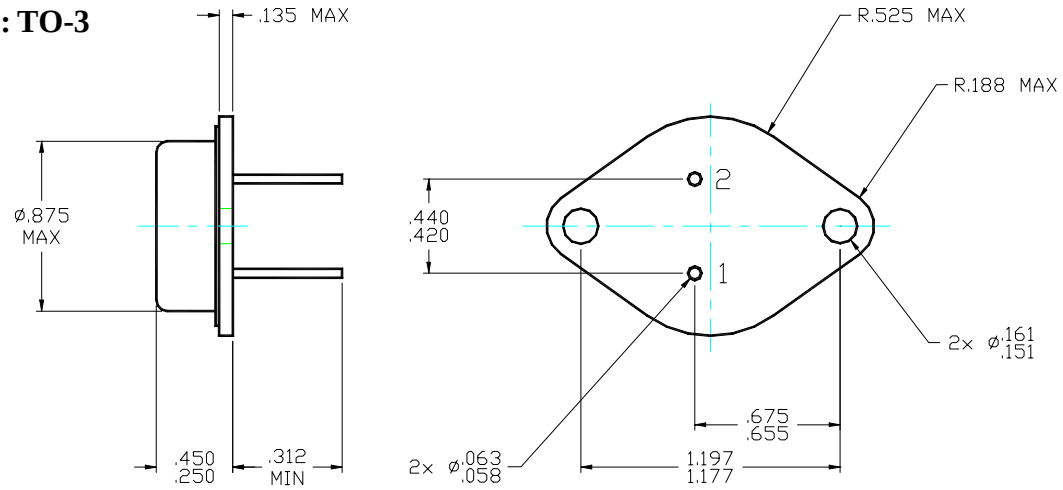
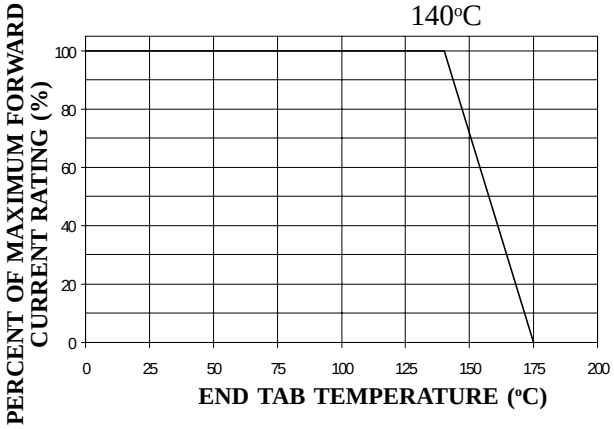
Electrical Characteristics (per Leg)		SYMBOL	MINIMUM	MAXIMUM	UNITS
Instantaneous Forward Voltage Drop (T_A = 25°C, 300µsec Pulse)	I_F = 10A I_F = 20A I_F = 40A	**V_{F1}** **V_{F2}** **V_{F3}**	-- -- --	**0.50** **0.58** **0.72**	**V_{DC}**
Instantaneous Forward Voltage Drop (I_F = 20 A, T_A = -55°C, 300µsec pulse)		**V_{F4}**	--	**0.65**	**V_{DC}**
Reverse Leakage Current (Rated V_R, 300µs pulse min.)	T_A = 25°C T_C = 100°C	**I_{R1}** **I_{R2}**	-- --	**400** **30**	**µA** **mA**
Junction Capacitance (V_R = 10V_{DC}, T_A = 25°C, f = 1MHz)		**C_J**	--	**1600**	**pF**

CASE OUTLINE: TO-3



TYPICAL OPERATING CURVES
(T_A = 25°C unless otherwise specified)



PIN ASSIGNMENT				
CODE	FUNCTION	PIN 1	PIN 2	CASE
--	Common Cathode	Anode	Anode	Cathode
--	Common Anode	Cathode	Cathode	Anode
--	Doubler	Anode	Cathode	Common