



SOLID STATE DEVICES, INC.

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SSR8045CT/3

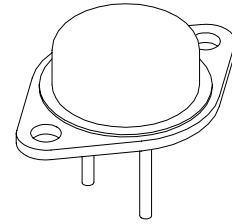
80AMPS 45 VOLTS POSITIVE CENTERTAP SCHOTTKY RECTIFIER

Designer's Data Sheet

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, $T_A = 25^\circ\text{C}$) ^{1/}	I_o	80	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave Superimposed on I_o , allow junction to reach equilibrium between pulses, $T_A = 25^\circ\text{C}$) ^{1/}	I_{FSM}	600	Amps
Operating and Storage Temperature	T_{OP} & T_{stg}	-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:
 $I_o = 40\text{A}$ per Leg and $I_{FSM} = 300\text{A}$ 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

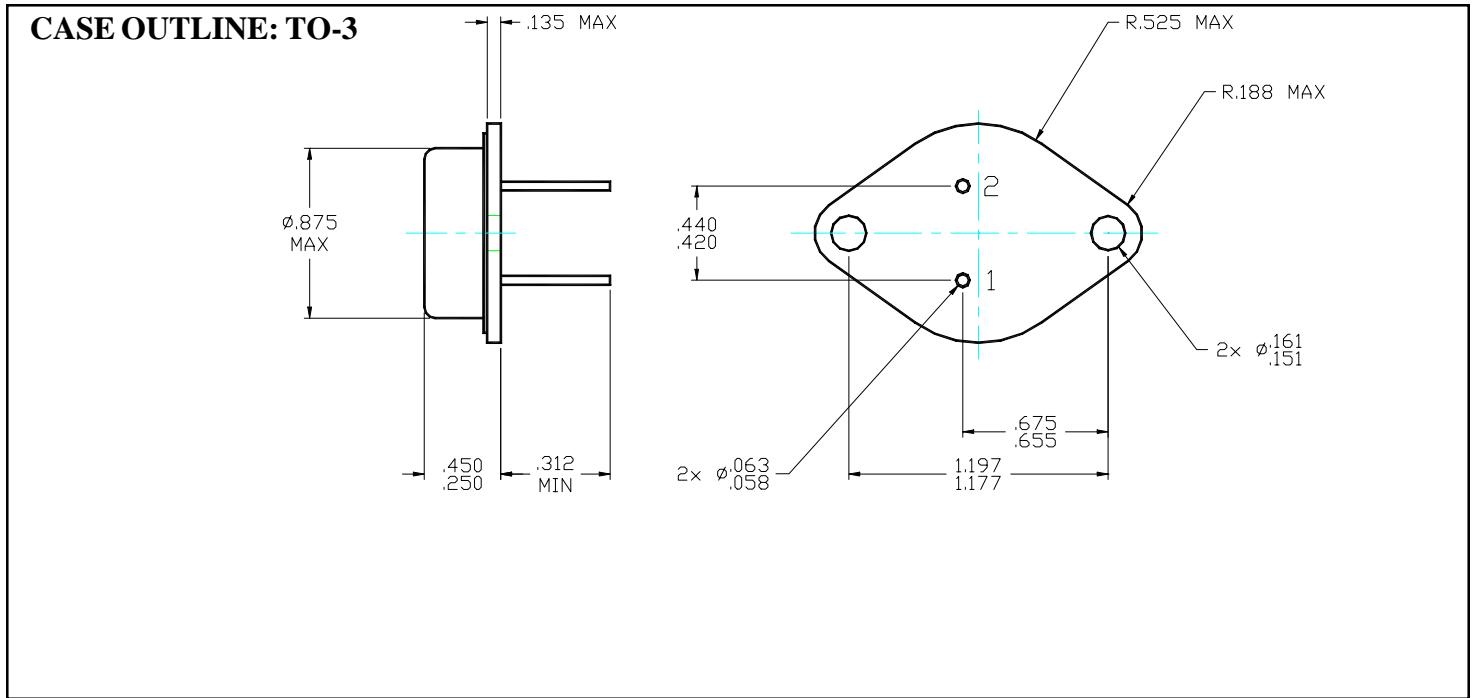
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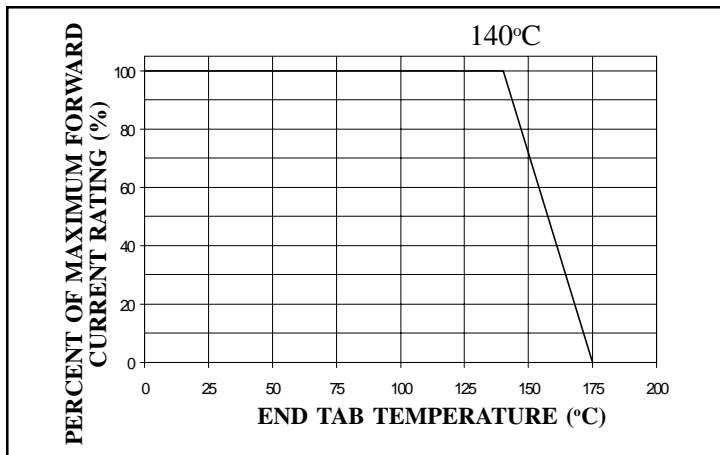
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Electrical Characteristics (per Leg)	SYMBOL	MINIMUM	MAXIMUM	UNITS
Instantaneous Forward Voltage Drop ($T_A = 25^\circ\text{C}$, 300 μsec Pulse)	$I_F = 10\text{A}$ V_{F1}	--	0.50	V_{DC}
	$I_F = 20\text{A}$ V_{F2}	--	0.58	
	$I_F = 40\text{A}$ V_{F3}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



TYPICAL OPERATING CURVES

($T_A = 25^\circ\text{C}$ 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