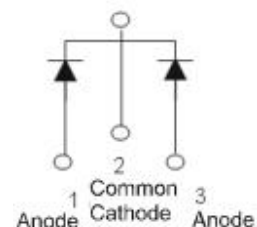


Schottky Barrier Rectifier

SBR30A45

FEATURES

- Dual Rectifier Conduction, Positive Center Tap
- Low Power Loss/High Efficiency
- High Current Capability, Low Forward Voltage Drop
- High Surge Capacity
- Guarding for Overvoltage protection
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications



ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM} V_{RMS} V_R	Peak Repetitive Reverse Voltage RMS Voltage DC Blocking Voltage	45	V
$I_{F(AV)}$	Average Rectified Forward Current (Per Leg) (Total)	15 30	A
I_{FSM}	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions	250	A
I_{RRM}	Peak Repetitive Reverse Surge Current (2 μ S - 1Khz)	3	A
T_J	Junction Temperature	-55~150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}\text{C}$

THERMAL CHARACTERISTICS

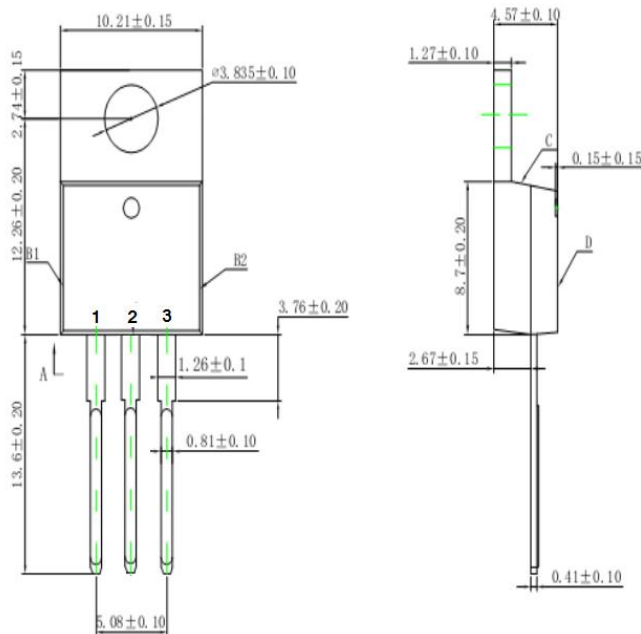
SYMBOL	PARAMETER	MAX	UNIT
R_{thj-c}	Thermal Resistance, Junction to Case	2.0	$^{\circ}\text{C}/\text{W}$

ELECTRICAL CHARACTERISTICS(Pulse Test: Pulse Width $\leq 300\mu\text{s}$, Duty Cycle $\leq 1\%$)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F=15\text{A}; T_C=25^{\circ}\text{C}$ $I_F=15\text{A}; T_C=125^{\circ}\text{C}$	0.50 0.45	V
I_R	Maximum Instantaneous Reverse Current	Rated DC Voltage, $T_C=25^{\circ}\text{C}$ Rated DC Voltage, $T_C=125^{\circ}\text{C}$	0.5 100	mA

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