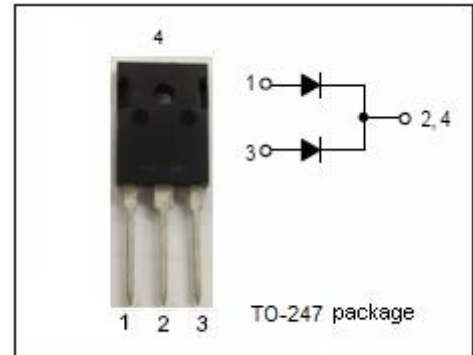


Schottky Barrier Rectifier

FST3050

FEATURES

- With TO-247 packaging
- Low leakage current
- Low power loss
- High efficiency
- High surge capacity
- Guarding for overvoltage protection
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

- Designed for designed for 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_{RWM} V_R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	50	V
$I_{F(AV)}$	Average Rectified Forward Current Per Leg @ $T_c=157^{\circ}\text{C}$	30	A
I_{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz) @ $T_j=175^{\circ}\text{C}$	350	A
T_J	Junction Temperature	175	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55~175	$^{\circ}\text{C}$

THERMAL CHARACTERISTICS

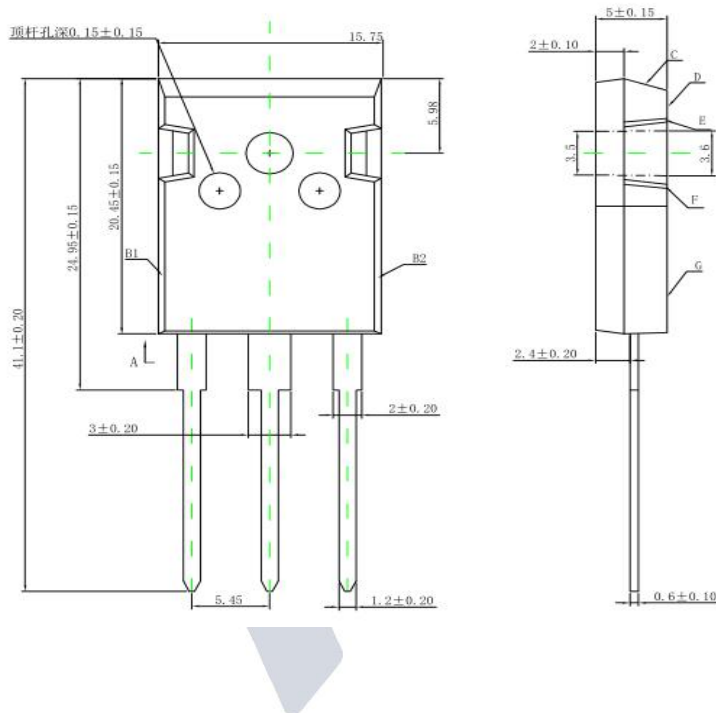
SYMBOL	PARAMETER	MAX	UNIT
R_{th-j-c}	Thermal Resistance, Junction to Case	0.9	$^{\circ}\text{C}/\text{W}$

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ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$) (Pulse Test: Pulse Width=300 μ s,Duty Cycle \leq 2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F=15\text{A};T_J=25^{\circ}\text{C}$ $I_F=15\text{A};T_J=125^{\circ}\text{C}$	0.66 0.50	V
I_R	Maximum Instantaneous Reverse Current	$V_{RRM}=50\text{V};T_J=25^{\circ}\text{C}$ $V_{RRM}=50\text{V};T_J=125^{\circ}\text{C}$	0.5 15	mA


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