

## Schottky Barrier Rectifier

SRF20150

## FEATURES

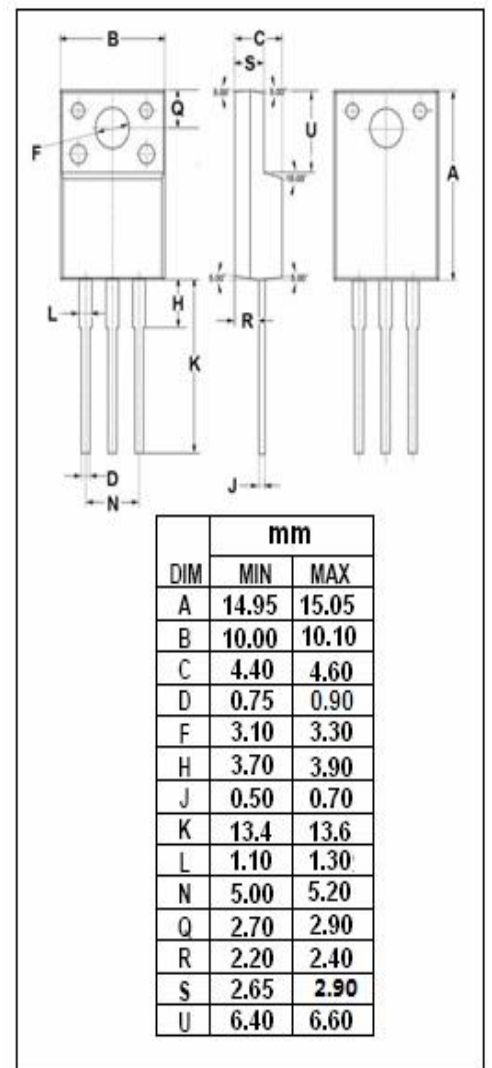
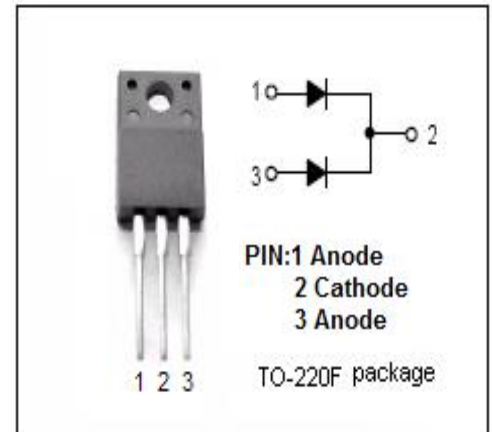
- With TO-220F packaging
- High junction temperature capability
- Low forward voltage
- High current capability
- Low power loss, high efficiency
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## APPLICATIONS

- Switching power supply
- Free-Wheeling diodes
- Reverse battery protection
- Center tap configuration

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{RRM}$	Peak Repetitive Reverse Voltage	150	V
$V_{RMS}$	RMS Voltage	105	
$V_R$	DC Blocking Voltage	150	
$I_{F(AV)}$	Average Rectified Forward Current @ $T_c=110^\circ\text{C}$	20	A
$I_{F(RMS)}$	RMS Forward Current	40	A
$I_{FSM}$	Nonrepetitive Peak Surge Current (10ms single half sine-wave superimposed on rated load conditions)	200	A
$T_J$	Junction Temperature	-65~150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-65~150	$^\circ\text{C}$



**Schottky Barrier Rectifier****SRF20150****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.5	°C/W

**ELECTRICAL CHARACTERISTICS** (Pulse Test: Pulse Width=300  $\mu$  s, Duty Cycle  $\leq$  1%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
$V_F$	Maximum Instantaneous Forward Voltage	$I_F = 10A$ ; $T_j = 25^\circ C$	1.02	V
$I_R$	Maximum Instantaneous Reverse Current	$V_R = \text{rated } V_{RRM}$ ; $T_j = 25^\circ C$ $T_j = 100^\circ C$	0.1 5.0	mA

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