

# Schottky Barrier Rectifier

## SRF30100CT

### FEATURES

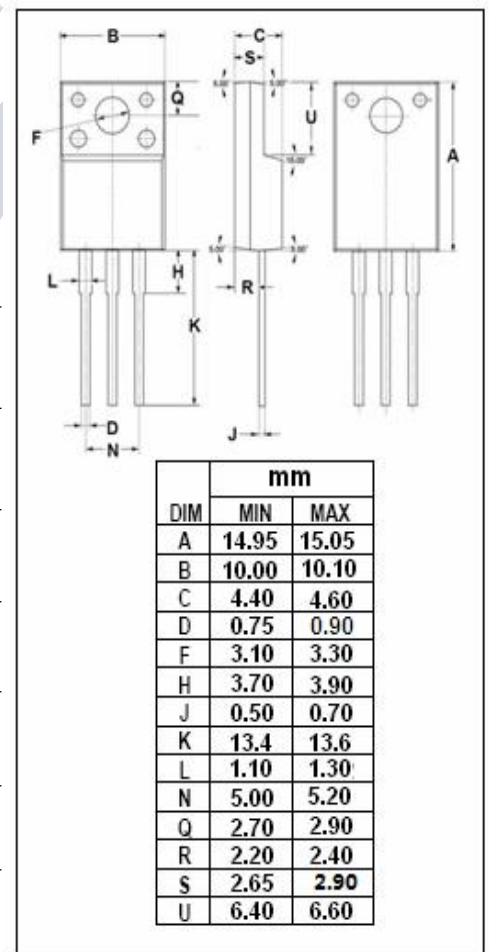
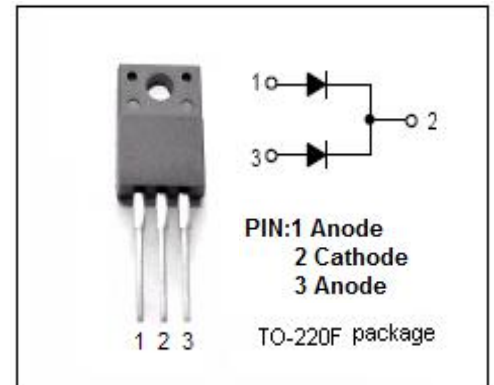
- Schottky Barrier Chip
- Low Power Loss/High Efficiency
- High current capability
- low forward voltage drop
- High surge capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### APPLICATIONS

- Designed for low-voltage,high frequency inverters, free wheeling and polarity protection applications .

### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>RRM</sub>	Peak Repetitive Reverse Voltage	100	V
I <sub>F(AV)</sub>	Average Rectified Forward Current (Rated V <sub>R</sub> ) T <sub>C</sub> = 95°C	30	A
I <sub>FSM</sub>	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	300	A
I <sub>RRM</sub>	Peak Repetitive Reverse Surge Current	0.5	A
T <sub>J</sub>	Junction Temperature	-65~150	°C
T <sub>stg</sub>	Storage Temperature Range	-65~150	°C



**Schottky Barrier Rectifier****SRF30100CT****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.0	°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	$I_F=15A$ ; $T_C=25^\circ C$	0.85	V
$I_R$	Maximum Instantaneous Reverse Current	Rated DC Voltage, $T_C=25^\circ C$ Rated DC Voltage, $T_C=100^\circ C$	0.5 50	mA

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