

# Schottky Barrier Rectifier

**SR20100**

## FEATURES

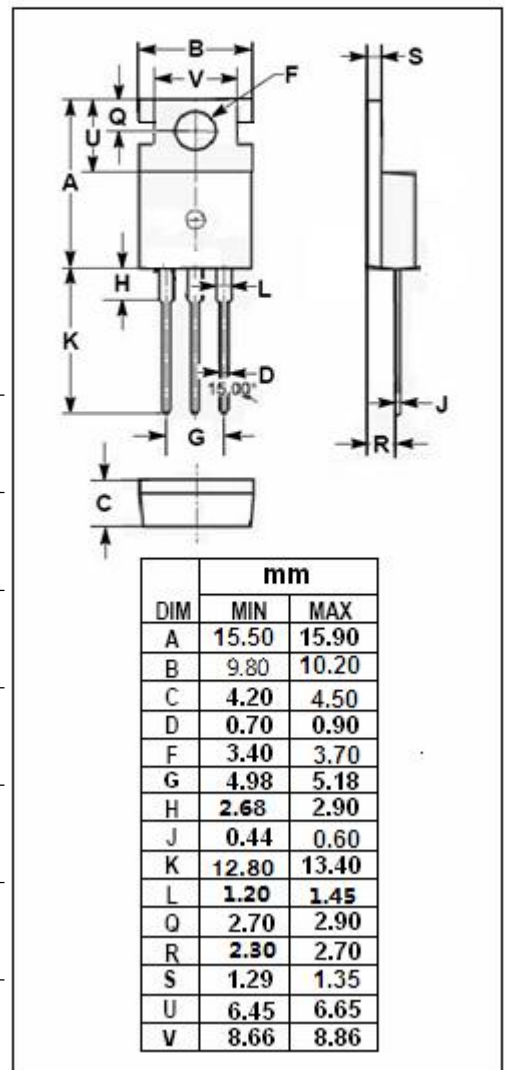
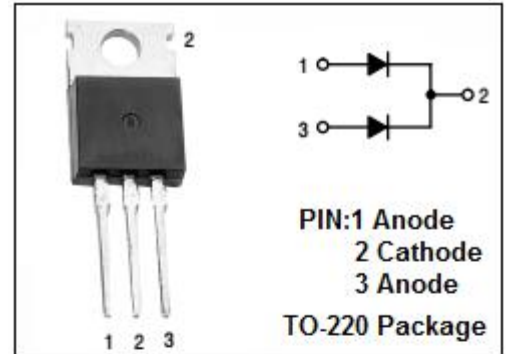
- Low Forward Voltage
- 175°C Operating Junction Temperature
- Guaranteed Reverse Avalanche
- Low Power Loss/High Efficiency
- High Surge Capacity
- Low Stored Charge Majority Carrier Conduction
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## MECHANICAL CHARACTERISTICS

- Case: Epoxy, Molded
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260°C Max. for 10 Seconds

## ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>RRM</sub> V <sub>RMS</sub> V <sub>R</sub>	Peak Repetitive Reverse Voltage RMS Voltage DC Blocking Voltage	100	V
I <sub>F(AV)</sub>	Average Rectified Forward Current (Rated V <sub>R</sub> ) T <sub>C</sub> = 100°C	20	A
I <sub>FSM</sub>	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions	100	A
I <sub>RRM</sub>	Peak Repetitive Reverse V <sub>r</sub> =100V;T <sub>j</sub> =25°C Current V <sub>r</sub> =100V;T <sub>j</sub> =125°C	0.1 16	mA
T <sub>J</sub>	Junction Temperature	-55~175	°C
T <sub>stg</sub>	Storage Temperature Range	-55~175	°C



**Schottky Barrier Rectifier****SR20100****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	2.5	°C/W

**ELECTRICAL CHARACTERISTICS** (Pulse Test: Pulse Width=300 μs, Duty Cycle≤1%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V <sub>F</sub>	Maximum Instantaneous Forward Voltage	I <sub>F</sub> = 10A ; T <sub>c</sub> = 25°C	0.90	V
I <sub>R</sub>	Maximum Instantaneous Reverse Current (Measured at 1MHz and Applied Reverse Voltage of 4.0V D.C)	T <sub>c</sub> = 25°C T <sub>c</sub> = 125°C	0.1 5.0	mA

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