

# Schottky Barrier Rectifier

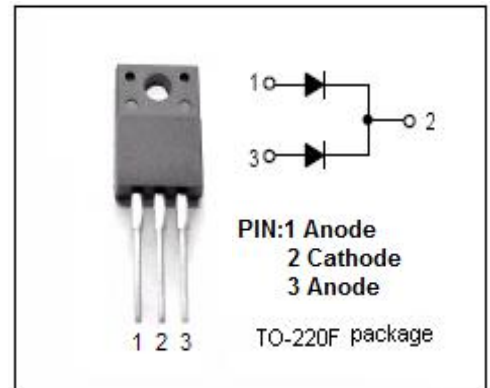
# SBCJ1040

## FEATURES

- 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
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

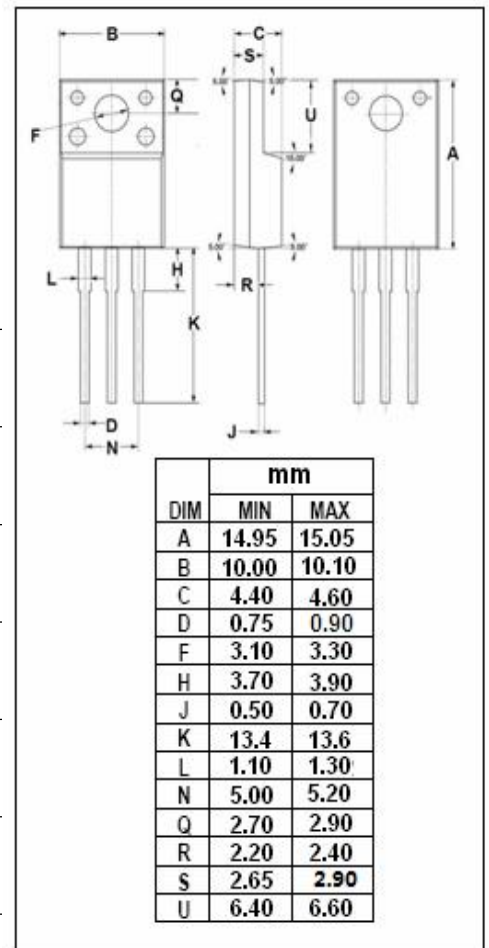
## MECHANICAL CHARACTERISTICS

- Case: Epoxy, Molded
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- High Temperature Soldering Guaranteed: 250°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	40	V
I <sub>F(AV)</sub>	Average Rectified Forward Current (Per Leg) (Total)	5 10	A
I <sub>FSM</sub>	Nonrepetitive Peak Surge Current 50/60Hz half sine-wave superimposed on rated load conditions	100/120	A
T <sub>J</sub>	Junction Temperature	-50~150	°C
T <sub>stg</sub>	Storage Temperature Range	-50~175	°C



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## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	5.5	°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> = 5A ; T <sub>C</sub> = 25°C	0.55	V
		I <sub>F</sub> = 10A ; T <sub>C</sub> = 25°C	0.63	
I <sub>R</sub>	Maximum Instantaneous Reverse Current	Rated DC Voltage, T <sub>C</sub> = 25°C	300	μA

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