

# Schottky Barrier Rectifier

# 10TQ035

## FEATURES

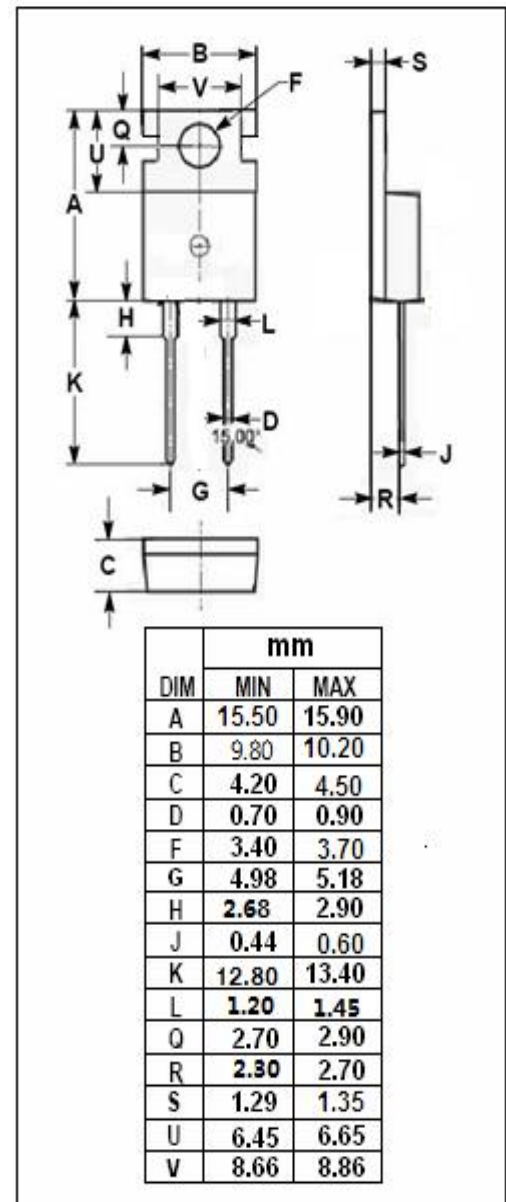
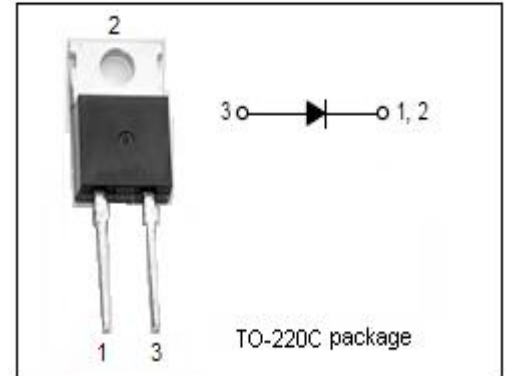
- With TO-220 packaging
- Metal silicon junction, majority carrier conduction
- Low leakage current, low power loss, high efficiency
- High current capability and low forward voltage drop
- Guardring for overvoltage protection
- High surge capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## APPLICATIONS

- Switching power supply
- High frequency inverters
- Freewheeling diodes
- Reverse battery protection
- Polarity protection applications

## 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	35	V
I <sub>F(AV)</sub>	Average Rectified Forward Current @T <sub>c</sub> =125°C	10	A
I <sub>FSM</sub>	Nonrepetitive Peak Surge Current ( t <sub>p</sub> =5 μ s sine )	1050	A
I <sub>RRM</sub>	Peak Repetitive Reverse Current	1.0	mA
T <sub>J</sub>	Junction Temperature	-55~175	°C
T <sub>stg</sub>	Storage Temperature Range	-55~175	°C



**Schottky Barrier Rectifier**
**10TQ035**
**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	2.0	°C/W

**ELECTRICAL CHARACTERISTICS** (Pulse Test: Pulse Width=300 μ s, 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 I <sub>F</sub> = 10A ; T <sub>c</sub> = 125°C I <sub>F</sub> = 20A ; T <sub>c</sub> = 25°C I <sub>F</sub> = 20A ; T <sub>c</sub> = 125°C	0.57 0.49 0.67 0.61	V
I <sub>R</sub>	Maximum Instantaneous Reverse Current	V <sub>R</sub> = rated V <sub>RRM</sub> ; T <sub>c</sub> = 25°C V <sub>R</sub> = rated V <sub>RRM</sub> ; T <sub>c</sub> = 125°C	2 15	mA

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