

Schottky Barrier Rectifier

10TQ035

FEATURES

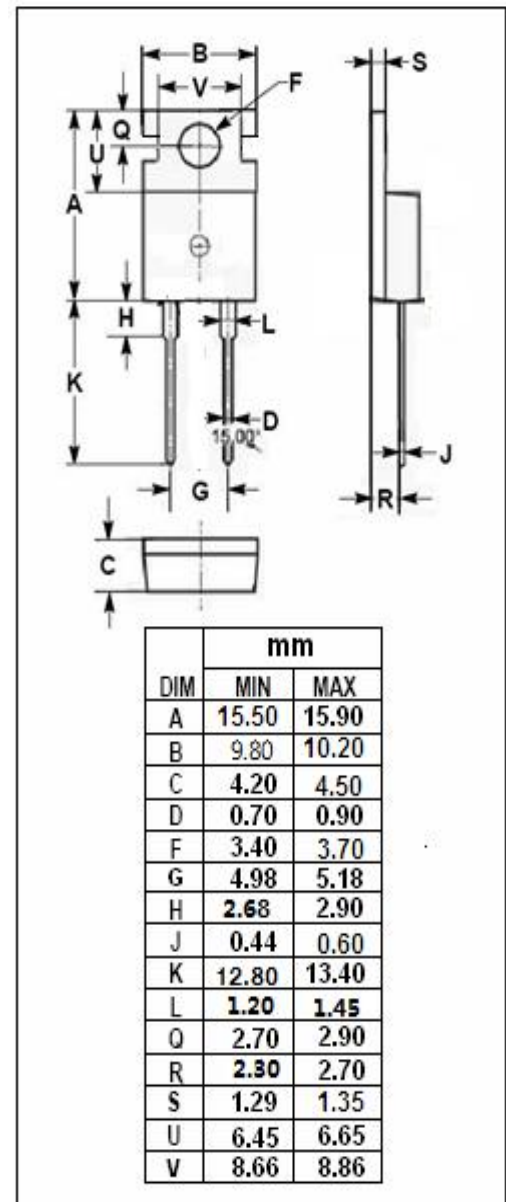
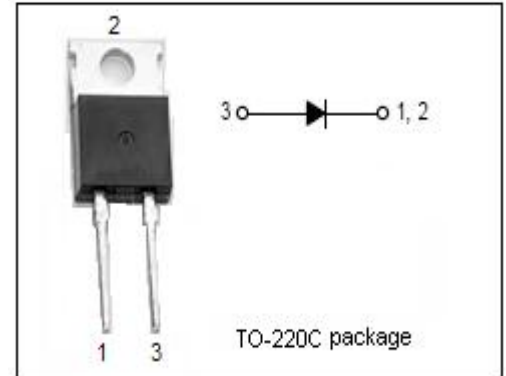
- With TO-220 packaging
- Metal silicon junction, majority carrier conduction
- Low leakage current, low power loss, high efficiency
- High current capability and low forward voltage drop
- Guardring for overvoltage protection
- High surge capability
- Minimum Lot-to-Lot variations for robust device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

APPLICATIONS

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

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM} V _{RMS} V _R	Peak Repetitive Reverse Voltage RMS Voltage DC Blocking Voltage	35	V
I _{F(AV)}	Average Rectified Forward Current @T _c =125°C	10	A
I _{FSM}	Nonrepetitive Peak Surge Current (t _p =5 μ s sine)	1050	A
I _{RRM}	Peak Repetitive Reverse Current	1.0	mA
T _J	Junction Temperature	-55~175	°C
T _{stg}	Storage Temperature Range	-55~175	°C



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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 μ s, Duty Cycle ≤ 1%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V _F	Maximum Instantaneous Forward Voltage	I _F = 10A ; T _c = 25°C I _F = 10A ; T _c = 125°C I _F = 20A ; T _c = 25°C I _F = 20A ; T _c = 125°C	0.57 0.49 0.67 0.61	V
I _R	Maximum Instantaneous Reverse Current	V _R = rated V _{RRM} ; T _c = 25°C V _R = rated V _{RRM} ; T _c = 125°C	2 15	mA

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