

Ultra fast Rectifier
D4020L
FEATURES

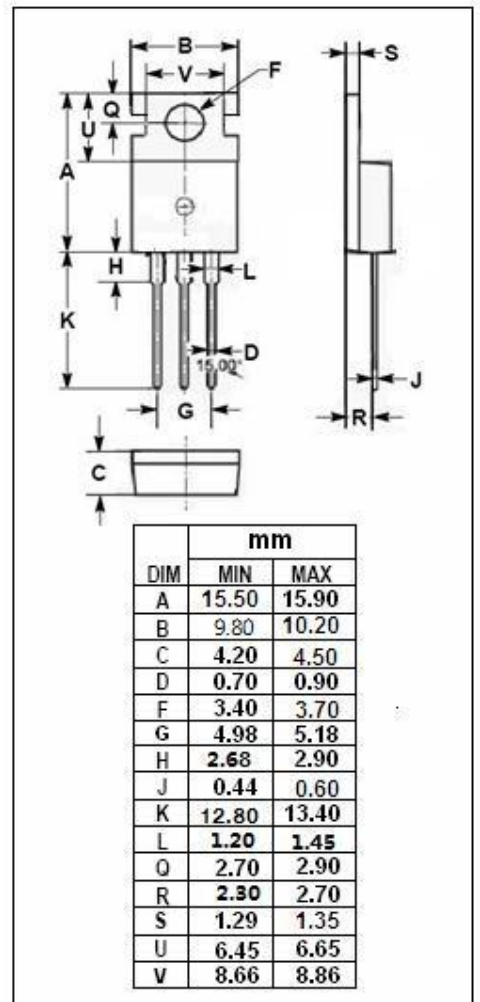
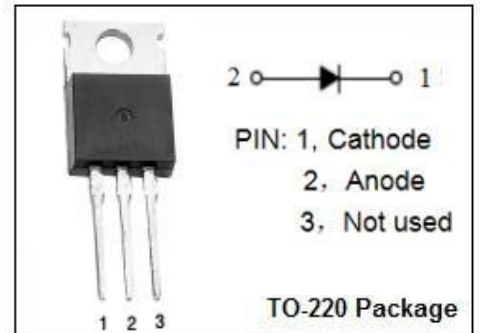
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- Guard ring for over voltage protection
- High surge capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- High frequency inverters
- 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	400	V
I _{F(AV)}	Average Rectified Forward Current @T _c =115°C	12.7	A
I _{FRM}	Repetitive Peak Forward Current@T _c =115°C	20	A
I _{FSM}	Nonrepetitive Peak Surge Current	50HZ 60HZ 255 300	A
T _j	Junction Temperature	-40~125	°C
T _{stg}	Storage Temperature Range	-40~150	°C



Ultra fast Rectifier**D4020L****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	2.55	°C/W

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V _F	Maximum Instantaneous Forward Voltage	I _F = 40A; T _C = 25°C	1.6	V
I _R	Maximum Instantaneous Reverse Current	V _R = rated V _{RRM} ; T _C = 25°C T _C =150°C	10 500	μ A

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