

**Ultra fast Rectifier**
**D6020L**
**FEATURES**

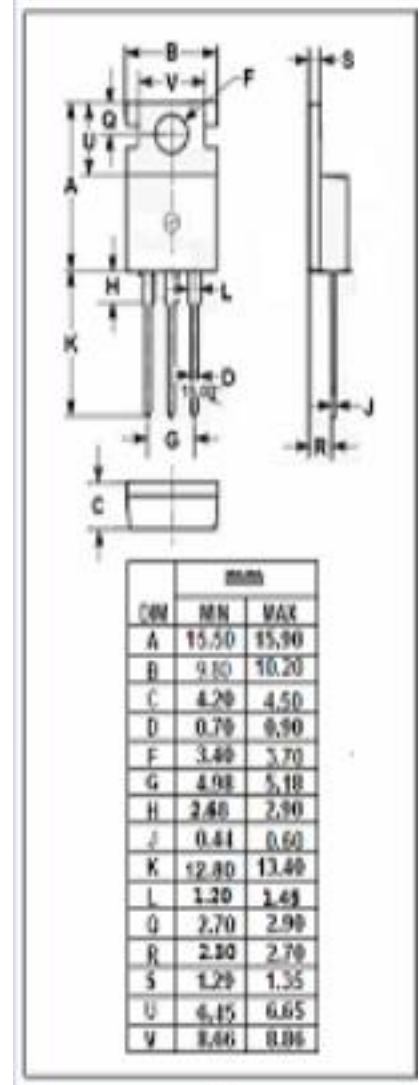
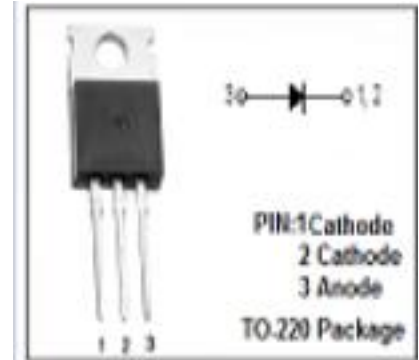
- With TO-220F packaging
- Low switching loss
- High surge current capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Switching power supply
- Power switching circuits
- General rectification

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

SYMBOL	PARAMETER	VALUE	UNIT
VRRM VRWM VR	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage $t_w=500ns; duty=1/40$	600	V
IF(AV)	Average Rectified Forward Current @T <sub>c</sub> =75°C	20	A
IFSM	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions; One shot	300	A
TJ	Junction Temperature	-55~150	°C
Tstg	Storage Temperature Range	-55~150	°C



## Ultra fast Rectifier

D6020L

## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{thj-c}$	Thermal Resistance, Junction to Case	2.5	°C/W

ELECTRICAL CHARACTERISTICS ( $T_a=25^{\circ}\text{C}$ ) (Pulse Test: Pulse Width=300  $\mu$  s, Duty Cycle  $\leq$  2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
$V_F$	Maximum Instantaneous Forward Voltage	$I_F=20\text{A}$	1.6	V
$I_R$	Maximum Instantaneous Reverse Current	$V_R=V_{RWM}; T_J=25^{\circ}\text{C}$ $V_R=V_{RWM}; T_J=125^{\circ}\text{C}$	10 1000	$\mu$ A
$t_{rr}$	Maximum Reverse Recovery Time	$I_F=0.9\text{A}; I_R=1.5\text{A}$	4	$\mu$ s

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