

Ultrafast Rectifier
C3D04060A
FEATURES

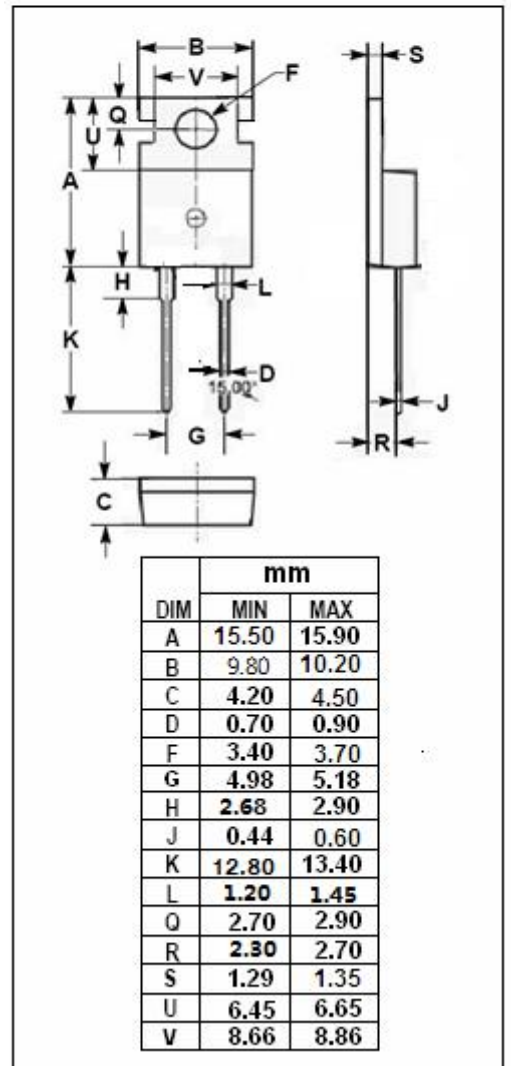
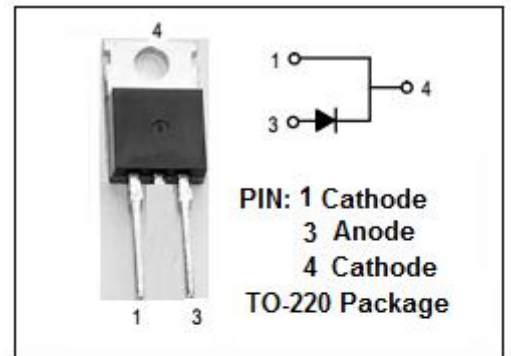
- Ultrafast with soft recovery
- Operating temperature
- Reverse voltage
- Avalanche energy rated
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- Power switching circuits
- General purpose

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _R RM V _R WM V _R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	600	V
I _{F(AV)}	Average Rectified Forward Current	4	A
I _{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	100	A
P _D	Maximum power dissipation	75	W
T _J	Junction Temperature	-55~175	°C
T _{stg}	Storage Temperature Range	-55~175	°C



Fast Recovery Rectifier**C3D04060A****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
R _{thj-c}	Thermal Resistance, Junction to Case	2.0	°C/W

ELECTRICAL CHARACTERISTICS (T_a=25°C) (Pulse Test: Pulse Width=300 μs, Duty Cycle ≤ 2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V _{F*}	Maximum Instantaneous Forward Voltage	I _F =3A; T _j =25°C I _F = 4A; T _j =25°C	1.25 1.28	V
I _R	Maximum Instantaneous Reverse Current	V _R = V _{RWM} ; T _j =150°C V _R = V _{RWM}	250 10	μ A
t _{rr}	Maximum Reverse Recovery Time	I _F =1A; di/dt = 200A/μs	50	ns

*:Pulse test ,Pulse width=300us,duty cycle≤2%

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