

Ultra fast Rectifier
FFAF60UA60DN
FEATURES

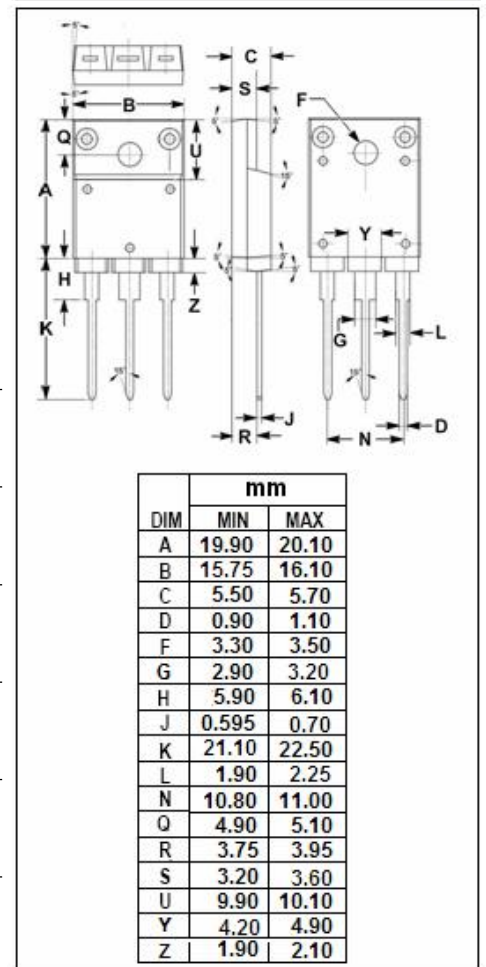
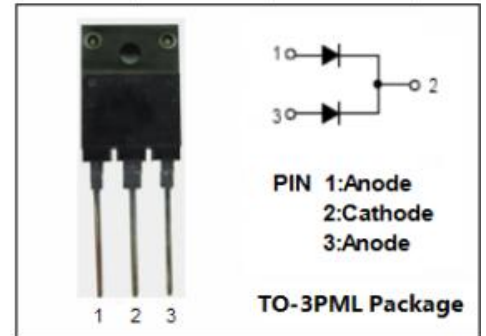
- With TO-3PML packaging
- High junction temperature capability
- Low forward voltage
- High current capability
- Low power loss, high efficiency
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- Free-Wheeling diodes
- Reverse battery protection
- Center tap configuration

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	600	V
I _{F(AV)}	Average Rectified Forward Current @T _c =45°C	30	A
I _{FSM}	Nonrepetitive Peak Surge Current (10ms single half sine-wave superimposed on rated load conditions)	180	A
T _J	Junction Temperature	-55~150	°C
T _{stg}	Storage Temperature Range	-55~150	°C



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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	2.4	°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 = 30A; T _C = 25°C I _F = 30A; T _C = 125°C	2.2 2.0	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	100 150	μ A
t _{rr}	Maximum Reverse Recovery Time	I _F =30A; dI _F /dt=-200A/ μ s	90	ns

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