

## Ultra fast Rectifier

## FMD-4206S

## FEATURES

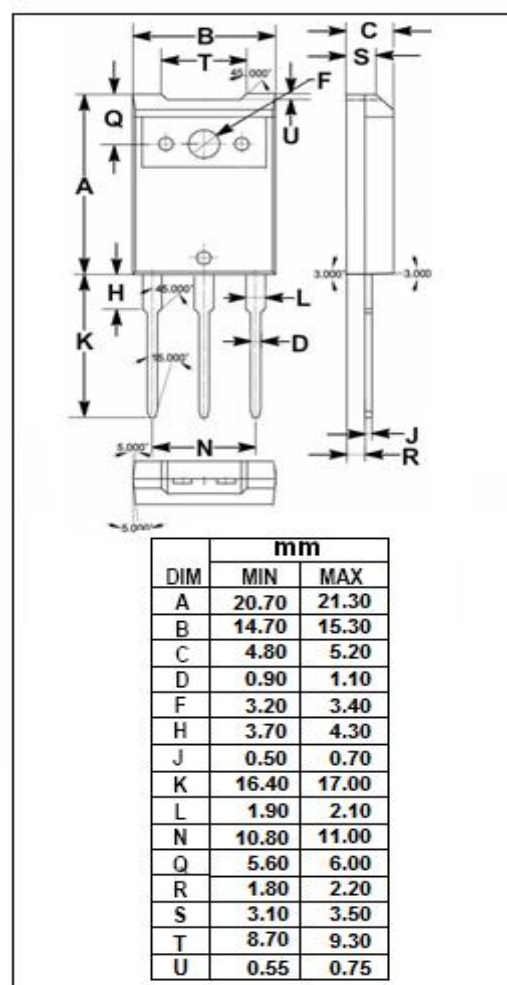
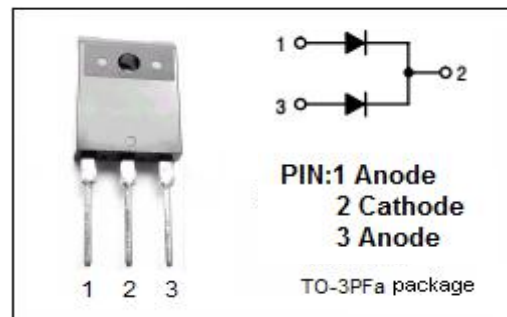
- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## APPLICATIONS

- Switching power supply
- Power switching circuits
- General purpose

ABSOLUTE MAXIMUM RATINGS( $T_a=25^{\circ}\text{C}$ )

SYMBOL	PARAMETER	VALUE	UNIT
VRRM VRWM VR	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage $t_w=500\text{ns}; \text{duty}=1/40$	400	V
IF(AV)	Average Rectified Forward Current @ $T_c=100^{\circ}\text{C}$	20	A
IFSM	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions;One shot	100	A
TJ	Junction Temperature	-40~150	$^{\circ}\text{C}$
Tstg	Storage Temperature Range	-40~150	$^{\circ}\text{C}$



**Ultra fast Rectifier****FMD-4206S****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{thj-c}$	Thermal Resistance, Junction to Case	2	$^{\circ}\text{C}/\text{W}$

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
$V_F$	Maximum Instantaneous Forward Voltage	$I_F=10\text{A}$	1.4	V
$I_R$	Maximum Instantaneous Reverse Current	$V_R=V_{RWM}$	20	$\mu\text{A}$
$t_{rr}$	Maximum Reverse Recovery Time	$I_F=0.5\text{A}$ ; 90% Recovery point	30	ns