

# Ultrafast Recovery Rectifier

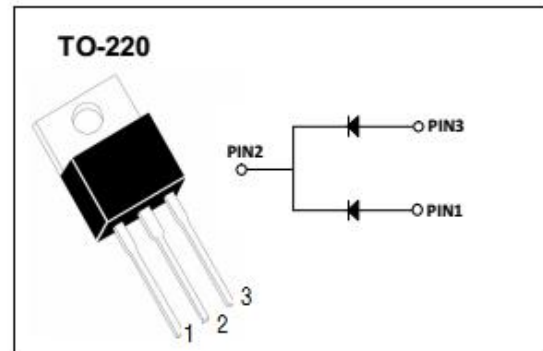
# FMG36S

## FEATURES

- Ultrafast recovery time
- Low leakage current
- 150°C Operating temperature
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## APPLICATIONS

- Switching power supply
- Automotive Inverters/Solar Inverters



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

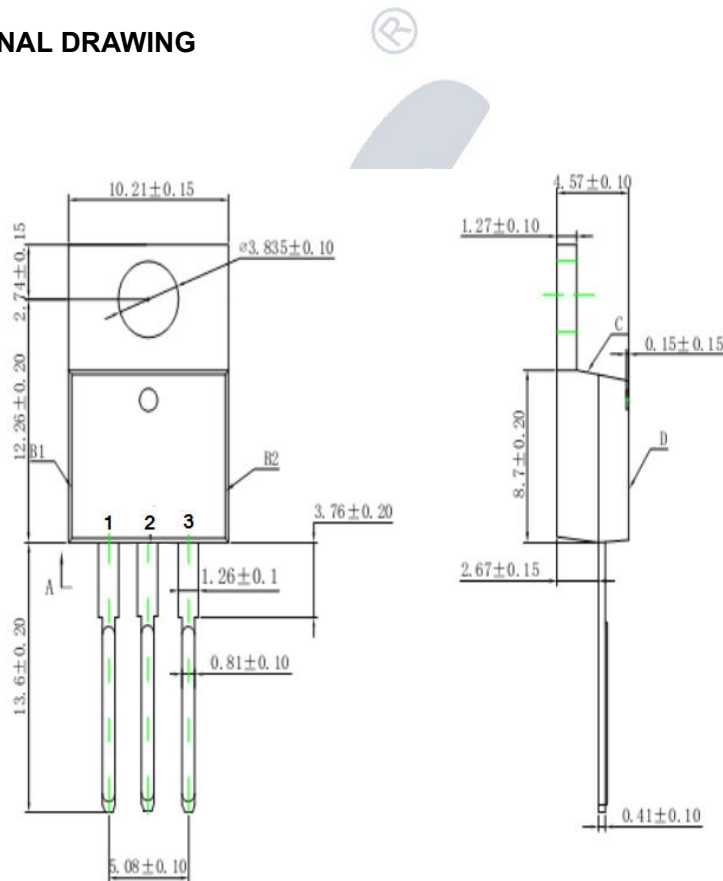
SYMBOL	PARAMETER	VALUE	UNIT
V <sub>R</sub> RM V <sub>R</sub> WM V <sub>R</sub>	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	600	V
I <sub>F</sub> (AV)	Average Rectified Forward Current	20	A
I <sub>FSM</sub>	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	175	A
P <sub>D</sub>	Maximum power dissipation	80	W
T <sub>J</sub>	Junction Temperature	-40~150	°C
T <sub>stg</sub>	Storage Temperature Range	-40~150	°C

## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	2.0	°C/W

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**FMG36S**
**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	$I_F=7.5\text{A}$	2.2	V
$I_R$	Maximum Instantaneous Reverse Current	$V_R=600\text{V}$	3	$\mu\text{A}$
$t_{rr}$	Maximum Reverse Recovery Time	$I_F=0.1\text{A}; I_{RP}=0.1\text{A}$	100	ns

**DIMENSIONAL DRAWING**


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