

Fast Recovery Rectifier

YG985C3R

FEATURES

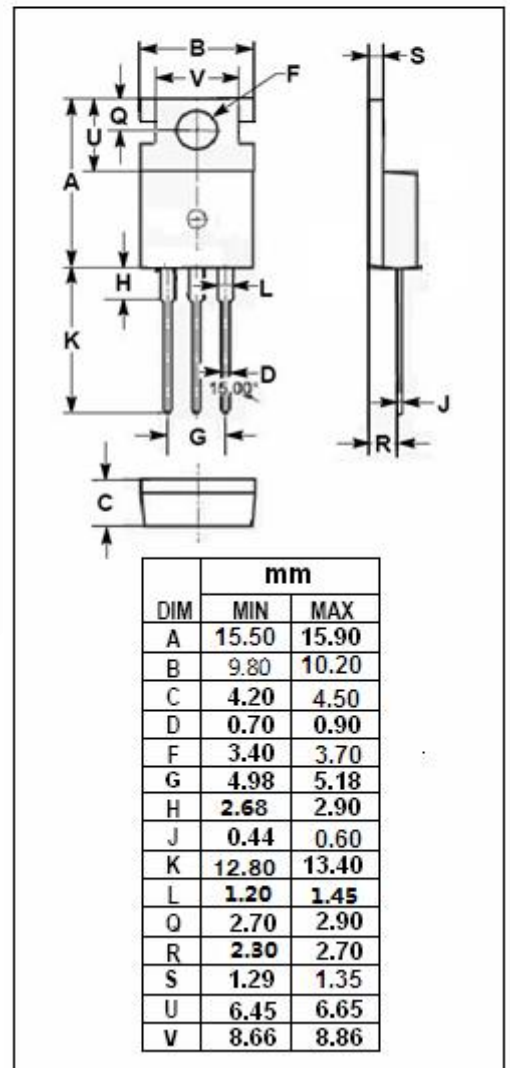
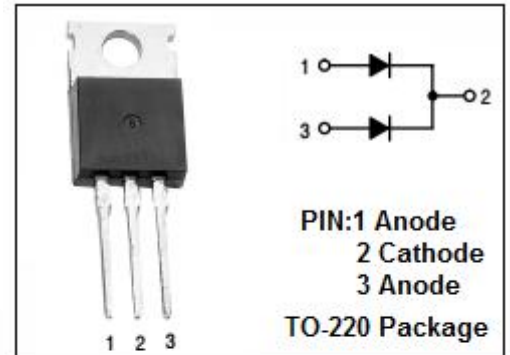
- Ultrafast with soft recovery
- 150°C Operating temperature
- Popular TO-220 package
- Avalanche energy rated
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- Power switching circuits
- General purpose

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM} V_{RWM} V_R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	300	V
$I_{F(AV)}$	Average Rectified Forward Current	20	A
I_{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	110	A
T_J	Junction Temperature	150	°C
T_{stg}	Storage Temperature Range	-40~150	°C



Ultrafast Rectifier

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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R_{thj-c}	Thermal Resistance, Junction to Case	1.75	$^{\circ}\text{C}/\text{W}$

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F=5\text{A}; T_J=25^{\circ}\text{C}$	1.3	V
I_R	Maximum Instantaneous Reverse Current	$V_R=V_{RWM}$	35	μA
t_{rr}	Maximum Reverse Recovery Time	$I_F=0.1\text{A}; I_R=0.2\text{A}$	40	ns