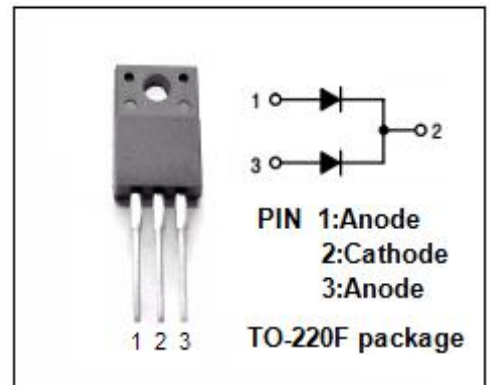


Ultrafast Recovery Rectifier
YG902C2R
FEATURES

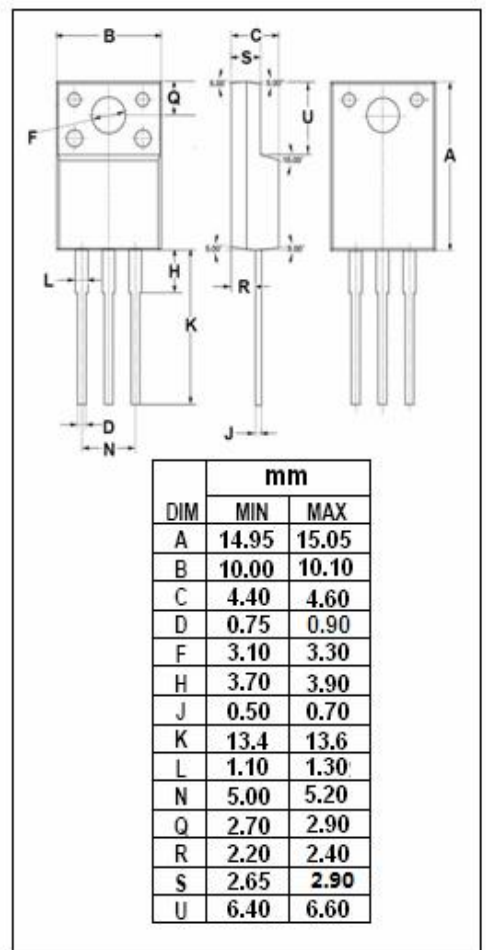
- Ultrafast Recovery Time
- Low Forward Voltage
- Low Leakage Current
- 150°C Operating Junction Temperature
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for use in output rectification stage of SMPS, UPS, dc-to-dc converters as well as freewheeling diode in low voltage inverters and chopper motor drives.


ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM} V _{RWM} V _R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	200	V
I _{F(AV)}	Average Rectified Forward Current Per Leg (Rated V _R) Total Device	5 10	A
I _{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions 8.3 half-mssine Wave-According to JEDEC Method)	50	A
T _J	Junction Temperature	-40~150	°C
T _{stg}	Storage Temperature Range	-40~150	°C



Ultrafast Recovery Rectifier

YG902C2R

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	3.5	°C/W

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F= 5A$	0.95	V
I_R	Maximum Instantaneous Reverse Current	$V_{RRM}= 200V$	100	μ A
t_{rr}	Maximum Reverse Recovery Time	$I_F= 0.1A, I_R= 0.2A, I_{REC}= 0.05A$	35	ns

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