INCHANGE SEMICONDUCTOR
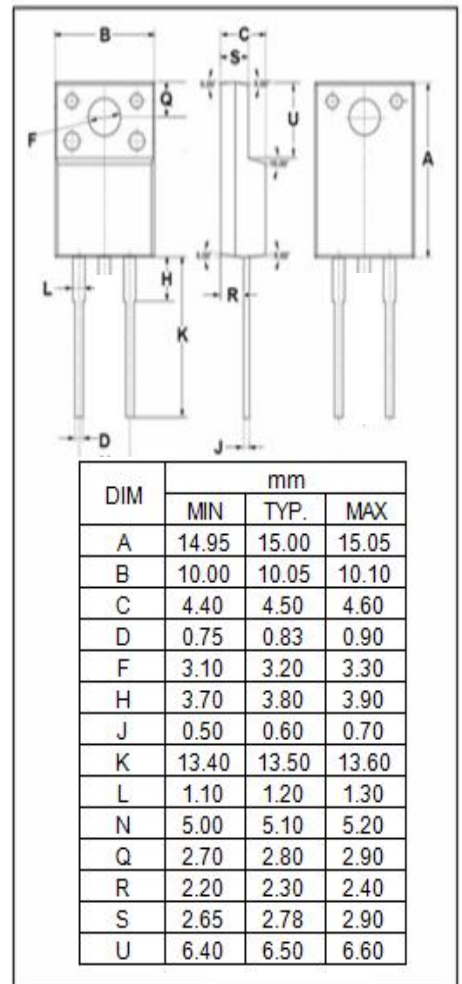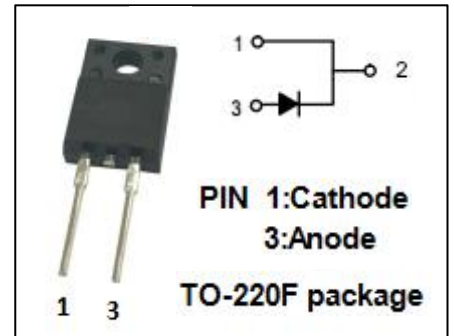
Ultrafast Recovery Rectifier

YG911S3

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

PIN 1:Cathode
3:Anode

TO-220F package

APPLICATIONS
- Designed for use in switching power supplies, inverters and as free wheeling diodes.

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

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 (Rated V_R)	5	A
I_{FSM}	Nonrepetitive Peak Surge Current Sine wave, 10ms 1shot	40	A
T_J	Junction Temperature	-40~150	℃
T_{stg}	Storage Temperature Range	-40~150	℃

DIM	mm		
	MIN	TYP.	MAX
A	14.95	15.00	15.05
B	10.00	10.05	10.10
C	4.40	4.50	4.60
D	0.75	0.83	0.90
F	3.10	3.20	3.30
H	3.70	3.80	3.90
J	0.50	0.60	0.70
K	13.40	13.50	13.60
L	1.10	1.20	1.30
N	5.00	5.10	5.20
Q	2.70	2.80	2.90
R	2.20	2.30	2.40
S	2.65	2.78	2.90
U	6.40	6.50	6.60

THERMAL CHARACTERISTICS

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

ELECTRICAL CHARACTERISTICS(T_a=25℃)   (Pulse Test: Pulse Width=300μs,Duty Cycle≤2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	I_F= 5A	1.2	V
I_R	Maximum Instantaneous Reverse Current	V_{RRM}=300V	100	μA
t_{rr}	Maximum Reverse Recovery Time	IF =0.1A, IR =0.2A, Irec =0.05A	35	ns

NOTICE：

ISC reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

ISC products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications.

ISC makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does ISC assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.