

# YG902C3R

**(300V / 10A TO-220F15)**

# LOW LOSS SUPER HIGH SPEED DIODE

## ■ Features

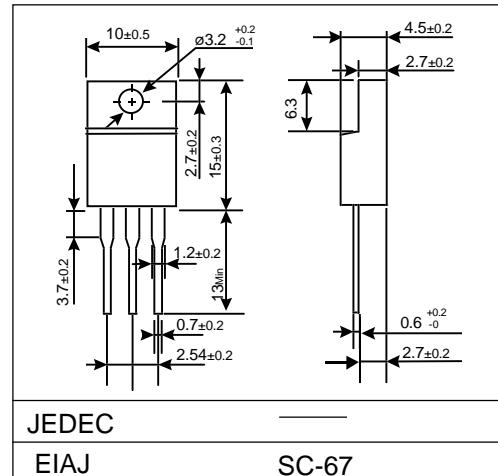
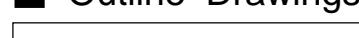
- Low VF
  - Super high speed switching.
  - High reliability by planer design.

## ■ Applications

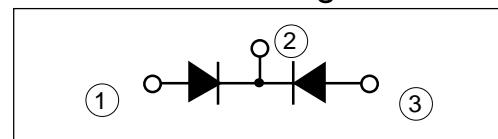
- High speed power switching.

## ■ Maximum Ratings and Characteristics

- Absolute Maximum Ratings



## ■ Connection Diagram



Item	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	V <sub>RRM</sub>		300	V
Repetitive peak surge reverse voltage	V <sub>RSM</sub>		300	V
Isolating voltage	V <sub>iso</sub>	Terminals to Case, AC. 1min.	1500	V
Average output current	I <sub>o</sub>	duty=1/2, T <sub>c</sub> =101°C Square wave	10*	A
Surge current	I <sub>FSM</sub>	Sine wave 10ms	40	A
Operating junction temperature	T <sub>j</sub>		-40 to +150	°C
Storage temperature	T <sub>stg</sub>		-40 to +150	°C

\* Out put current of centertap full wave connection.

- Electrical Characteristics ( $T_a=25^\circ\text{C}$  Unless otherwise specified )

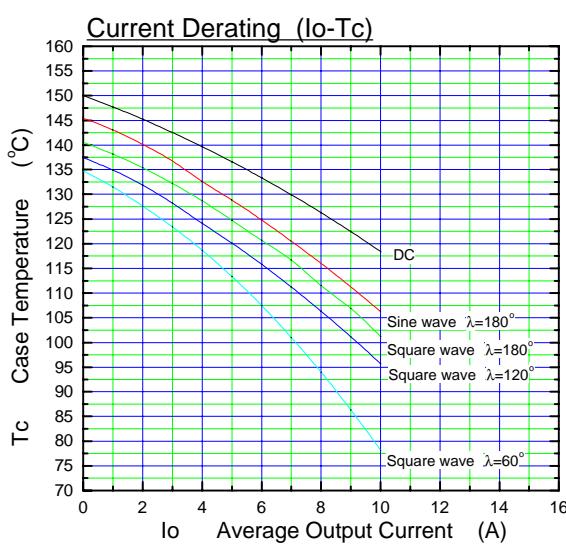
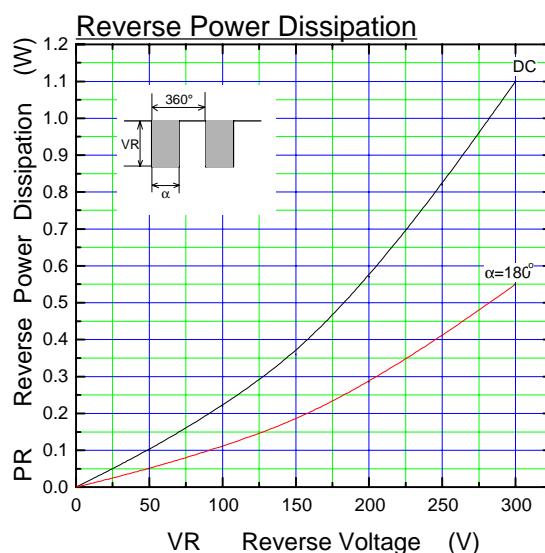
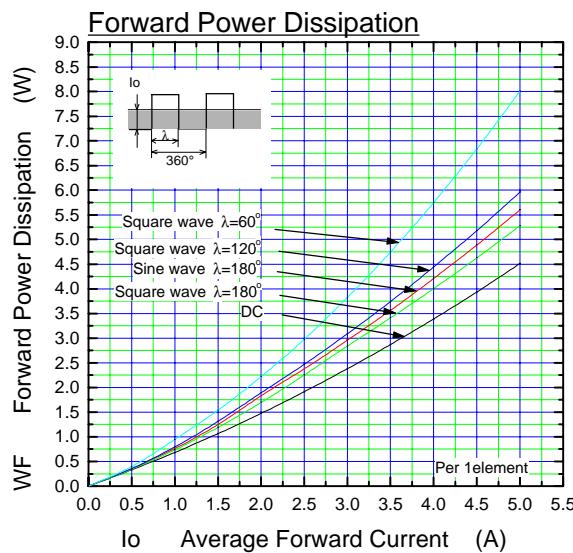
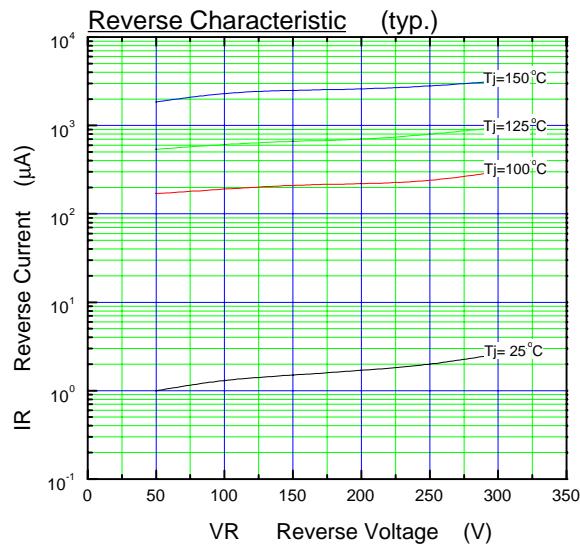
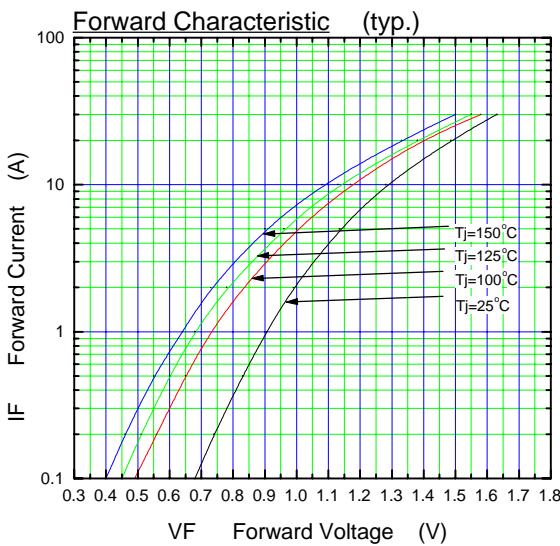
Item	Symbol	Conditions	Max.	Unit
Forward voltage drop **	$V_F$	$I_F=5A$	1.2	V
Reverse current **	$I_R$	$V_R=V_{RRM}$	100	$\mu A$
Reverse recovery time	$t_{rr}$	$I_F=0.1A, I_R=0.2A, I_{rec}=0.05A$	35	ns
Thermal resistance	$R_{th(j-c)}$	Junction to case	3.5	$^{\circ}C/W$

\*\* Rating per element

- #### • Mechanical Characteristics

Mounting torque	Recommended torque	0.3 to 0.5	N · m
Weight		2.3	g

## ■ Characteristics



$\lambda$ : Conduction angle of forward current for each rectifier element  
 $I_o$ : Output current of center-tap full wave connection

