

# YG912S2R

(200V / 10A TO-220F15)

## LOW LOSS SUPER HIGH SPEED DIODE

### Features

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

### Applications

- High speed power switching.

### Maximum Ratings and Characteristics

- Absolute Maximum Ratings

Item	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	$V_{RRM}$		200	V
Repetitive peak surge reverse voltage	$V_{RSM}$		200	V
Isolation voltage	$V_{iso}$	Terminals to Case, AC, 1min.	1500	V
Average output current	$I_o$	duty=1/2, $T_c=116^\circ\text{C}$ Rectangl wave	10	A
Surge current	$I_{FSM}$	Sine wave 10ms	80	A
Operating junction temperature	$T_j$		-40 to +150	$^\circ\text{C}$
Storage temperature	$T_{stg}$		-40 to +150	$^\circ\text{C}$

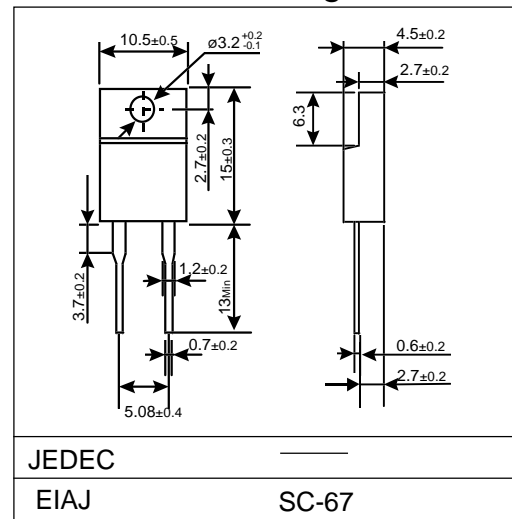
- Electrical Characteristics ( $T_a=25^\circ\text{C}$  Unless otherwise specified)

Item	Symbol	Conditions	Max.	Unit
Forward voltage drop	$V_F$	$I_F=10\text{A}$	0.98	V
Reverse current	$I_R$	$V_R=V_{RRM}$	200	$\mu\text{A}$
Reverse recovery time	$t_{rr}$	$I_F=0.1\text{A}, I_R=0.2\text{A}, I_{rec}=0.05\text{A}$	35	ns
Thermal resistance	$R_{th(j-c)}$	Junction to case	3.5	$^\circ\text{C/W}$

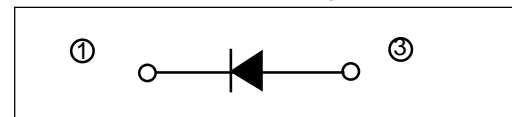
- Mechanical Characteristics

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

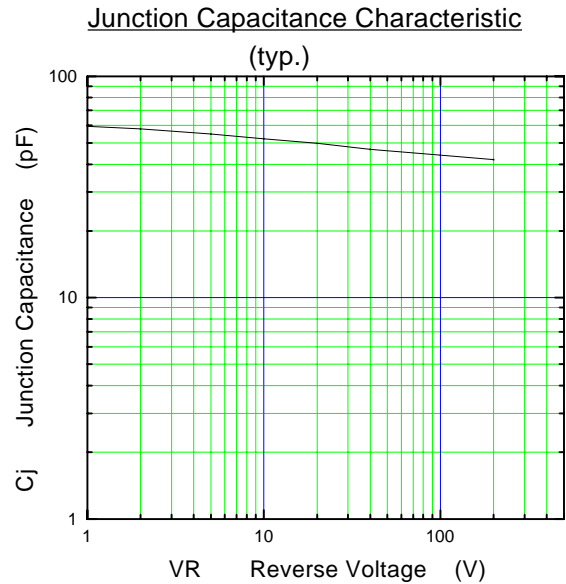
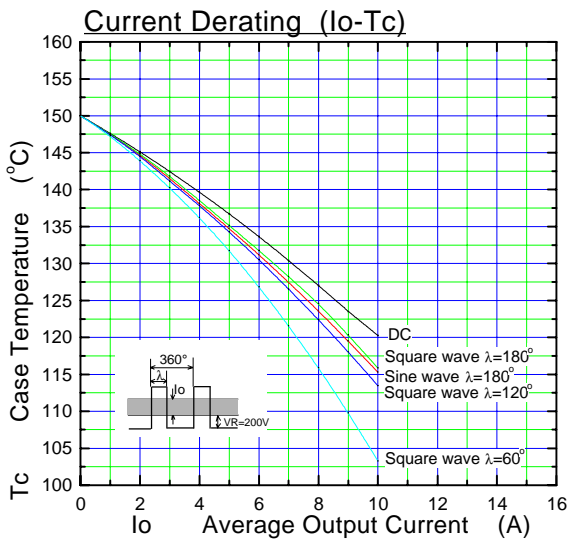
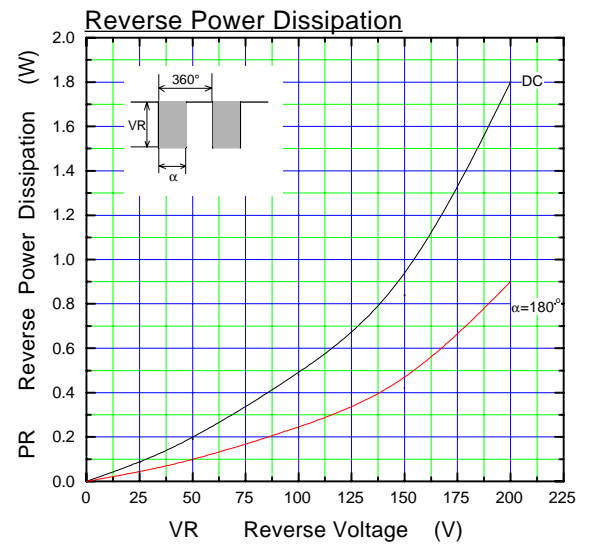
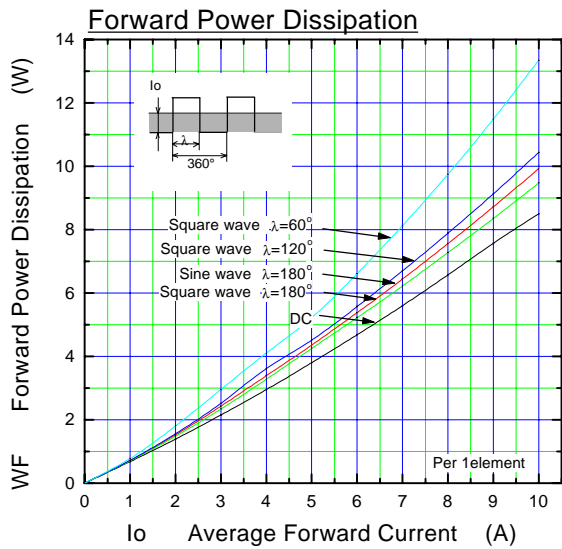
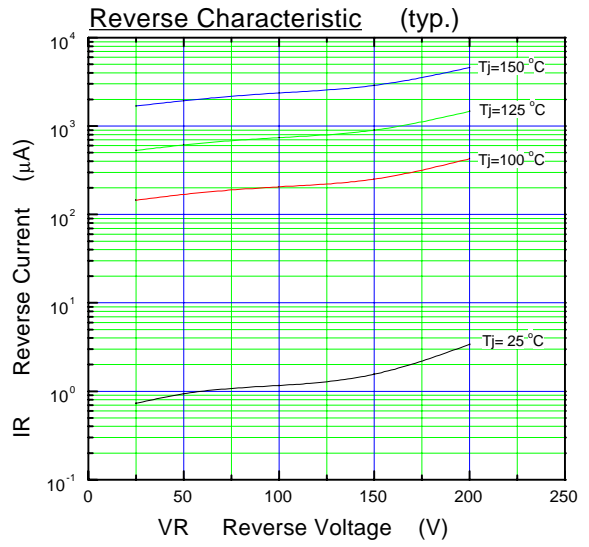
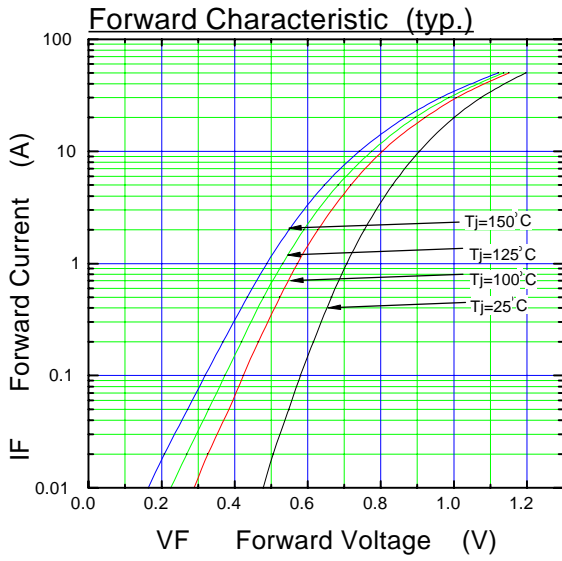
### Outline Drawings



### Connection Diagram



Characteristics



λ: Conduction angle of forward current for each rectifier element  
 Io: Output current of center-tap full wave connection

