

# YG901C3R

LLD (300V / 5A 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	$V_{RRM}$		300	V
Repetitive Peak Surge Reverse Voltage	$V_{RSM}$		300	V
Isolation Voltage	$V_{iso}$	Terminals to Case, AC. 1min.	1500	V
Average Output Current	$I_o$	duty=1/2, $T_c=105^\circ\text{C}$ Square wave	5*	A
Surge Current	$I_{FSM}$	Sine wave 10ms	25	A
Operating Junction Temperature	$T_j$		-40 to +150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$		-40 to +150	$^\circ\text{C}$

\* Out put current of centertap full wave connection.

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

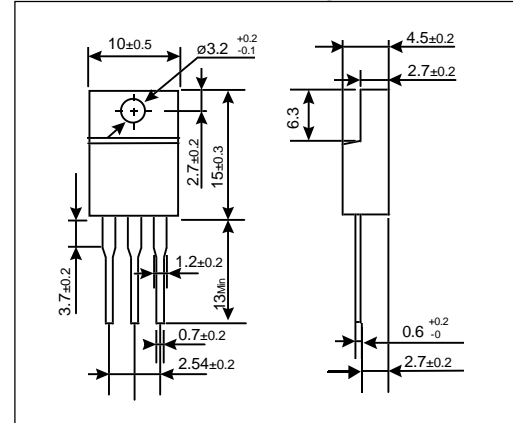
Item	Symbol	Conditions	Max.	Unit
Forward Voltage Drop **	$V_F$	$I_F=2.5\text{A}$	1.2	V
Reverse Current **	$I_R$	$V_R=V_{RRM}$	100	$\mu\text{A}$
Reverse recovery time	$t_{rr}$	$I_F=0.1\text{A}, I_R=0.2\text{A}, I_{rec}=0.05\text{A}$	35	ns
Thermal Resistance	$R_{th(j-c)}$	Junction to case	5.0	$^\circ\text{C/W}$

\*\* Rating per element

- Mechanical Characteristics

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

### Outline Drawings

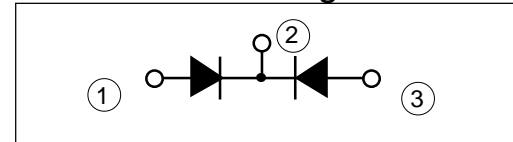


JEDEC

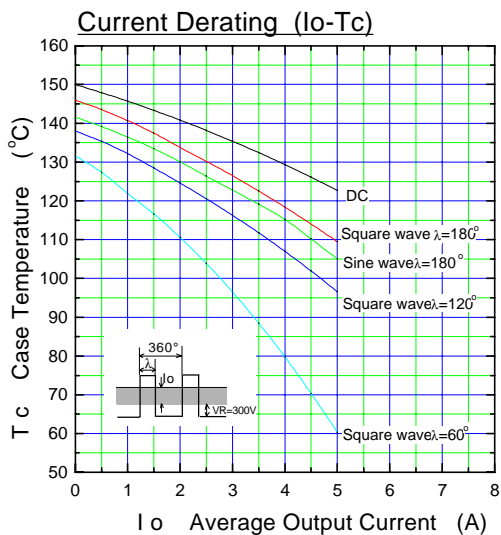
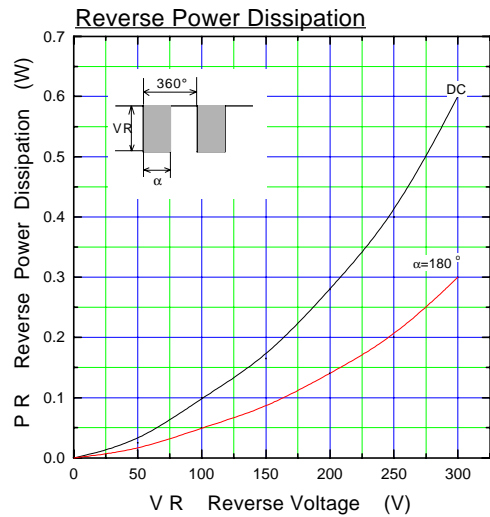
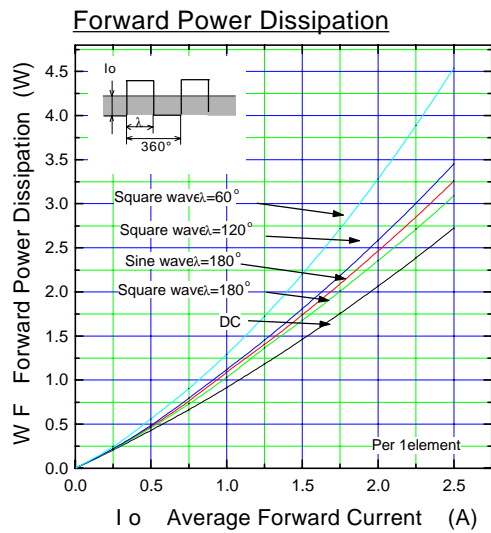
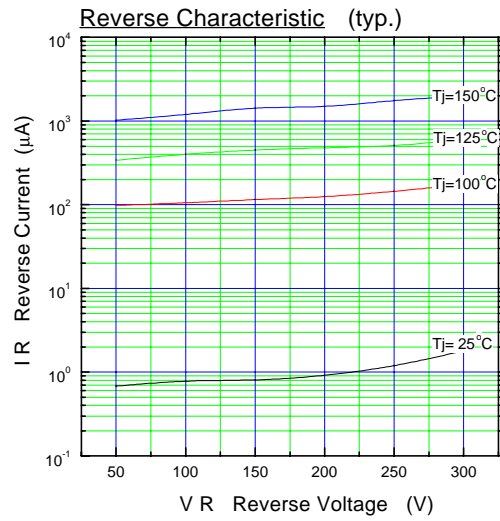
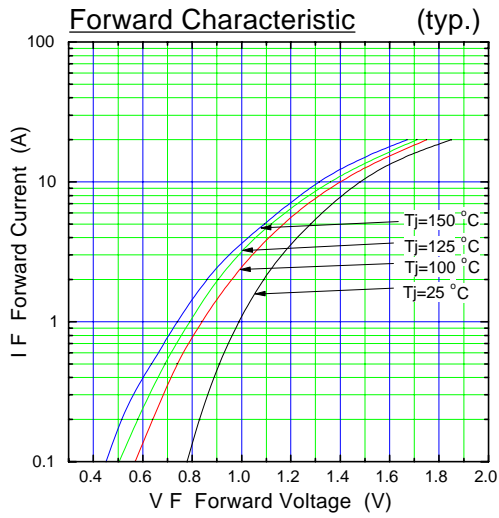
EIAJ

SC-67

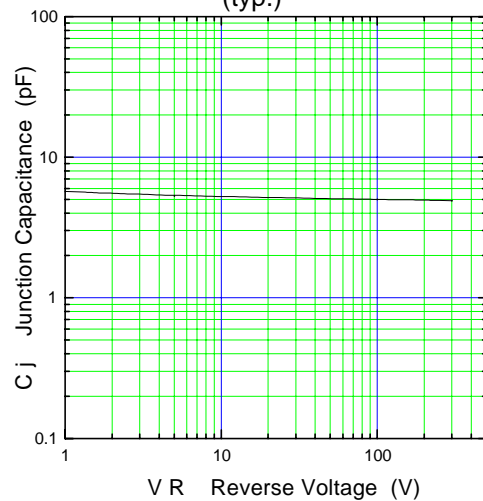
### Connection Diagram



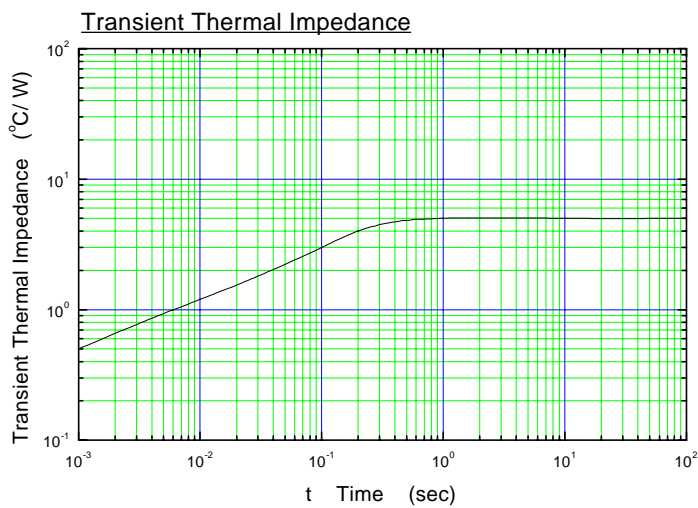
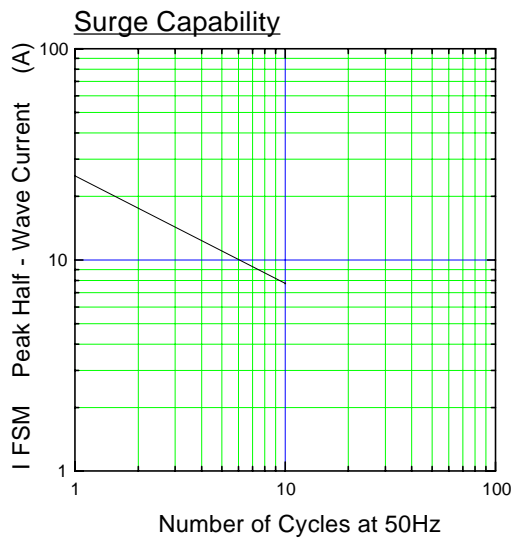
■ Characteristics



**Junction Capacitance Characteristic (typ.)**



$\lambda$ : Conduction angle of forward current for each rectifier element  
I<sub>o</sub>: Output current of center-tap full wave connection



**DERATING**

