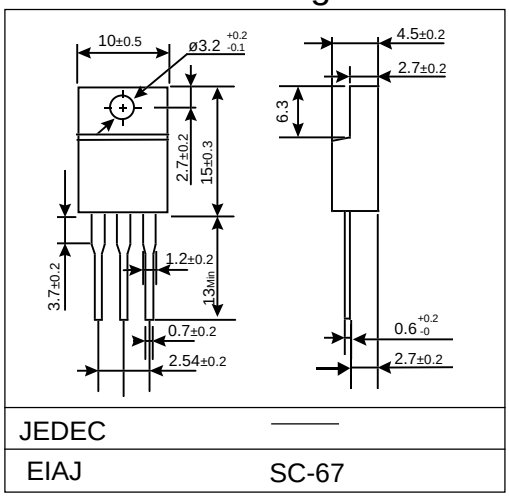
YG901C2R

L L D (200V / 5A TO-22OF15)

LOW LOSS SUPER HIGH SPEED DIODE

■ Outline Drawings



JEDEC	———
EIAJ	SC-67

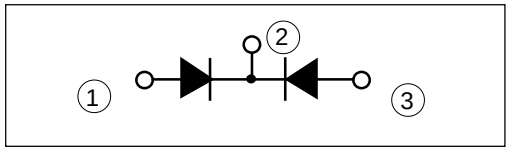
■ Features

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

■ Applications

- High speed power switching.

■ Connection Diagram



■ 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
Isolating voltage	V_{iso}	Terminals to Case, AC. 1min.	1500	V
Average output current	I_O	duty=1/2, Tc=120°C Square wave	5*	A
Suege current	I_{FSM}	Sine wave 10ms	25	A
Operating junction temperature	T_j		-40 to +150	°C
Storage temperature	T_{stg}		-40 to +150	°C

* Out put current of centertap full wave connection.

- Electrical Characteristics (Ta=25°C Unless otherwise specified)

Item	Symbol	Conditions	Max.	Unit
Forward voltage drop **	V_F	I_F=2.5A	0.95	V
Reverse current **	I_R	V_R=V_{RRM}	100	μA
Reverse recovery time	trr	I_F=0.1A,I_R=0.2A,Irec=0.05A	35	ns
Thermal resistance	$R_{th(j-c)}$	Junction to case	3.5	°C/W

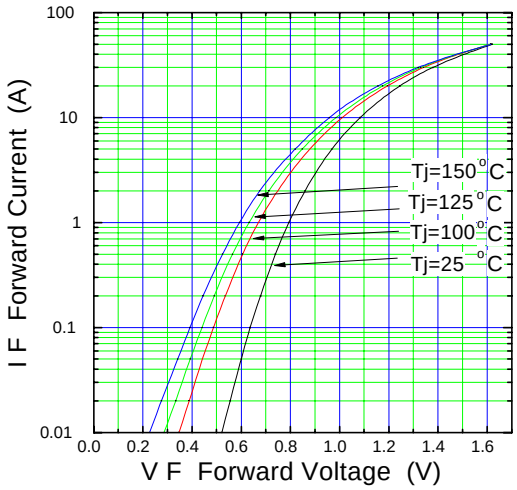
** Rating per element

- Mechanical Characteristics

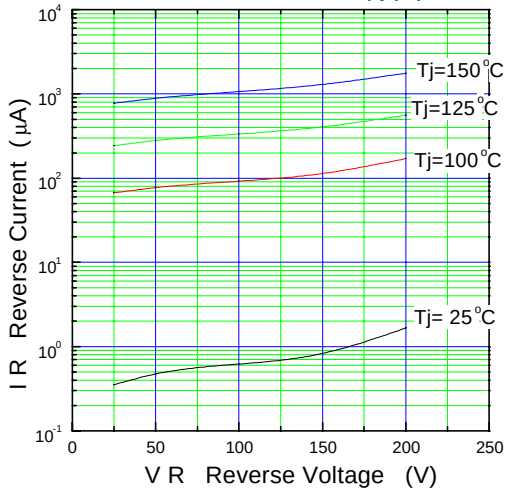
Mounting torque	Recommended torque	0.3 to 0.5	N · m
Weight		2.3	g

Characteristics

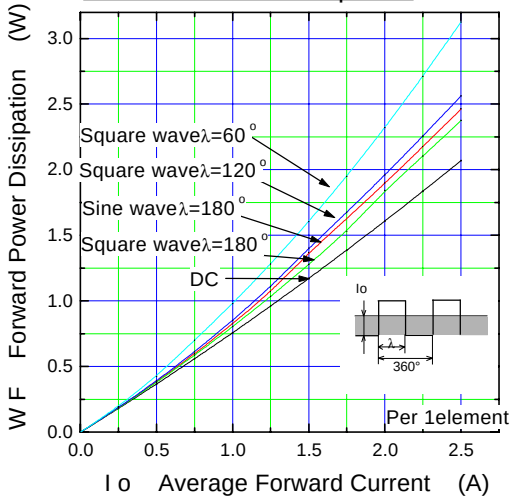
Forward Characteristic(typ.)



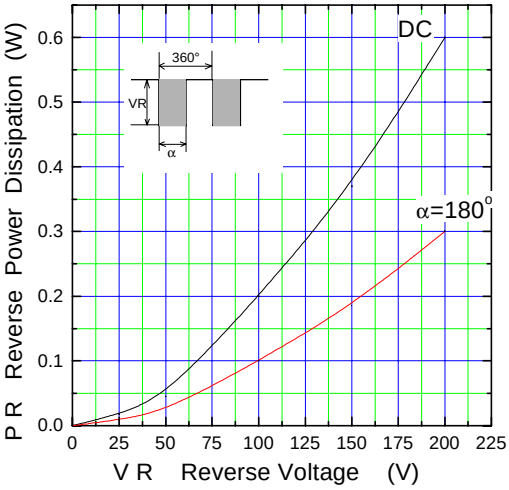
Reverse Characteristic(typ.)



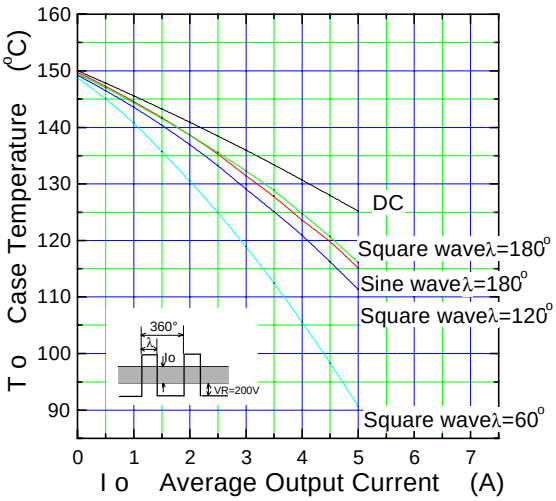
Forward Power Dissipation



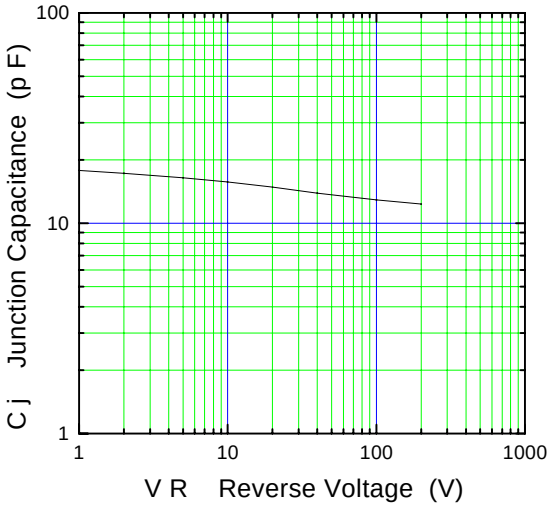
Reverse Power Dissipation



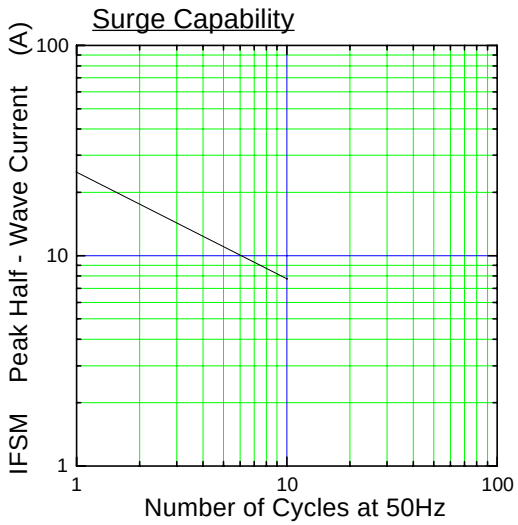
Current Derating (Io-Tc)

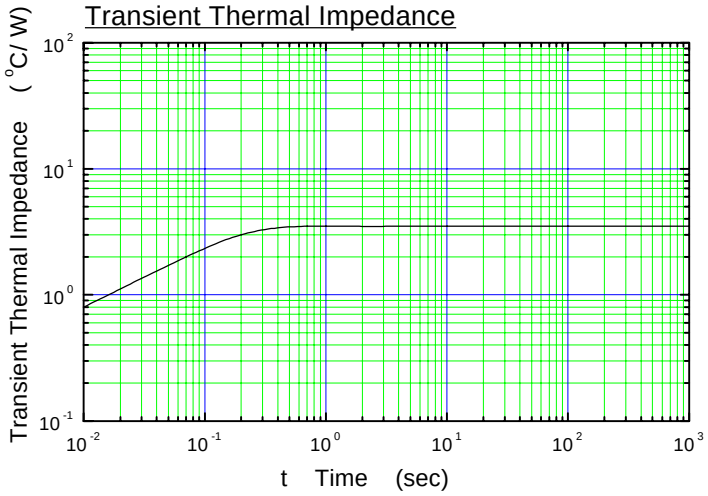


Junction Capacitance Characteristic (typ.)

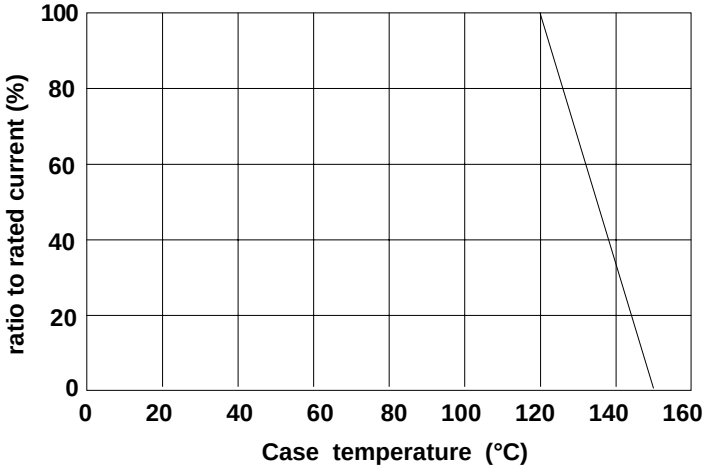


λ:Conduction angle of forward current for each rectifier element
Io:Output current of center-tap full wave connection


Surge Capability
IFSM Peak Half - Wave Current (A)
100
10
1
1
10
100
Number of Cycles at 50Hz


Transient Thermal Impedance
Transient Thermal Impedance (°C/ W)
10 2
10 1
10 0
10 -1
10 -2
10 -1
10 0
10 1
10 2
10 3
t Time (sec)

DERATING


ratio to rated current (%)
100
80
60
40
20
0
0
20
40
60
80
100
120
140
160
Case temperature (°C)