

# YG906C2R

L L D (200V / 20A 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 | $V_{RSM}$ | $t_w=500ns, duty=1/40$                      | 200         | V           |
| Isolating voltage                     | $V_{iso}$ | Terminals to Case, AC, 1min.                | 1500        | V           |
| Average output current                | $I_o$     | $duty=1/2, T_c=102^{\circ}C$<br>Square wave | 20*         | A           |
| Suege current                         | $I_{FSM}$ | Sine wave 10ms                              | 80          | A           |
| Operating junction temperature        | $T_j$     |                                             | -40 to +150 | $^{\circ}C$ |
| Storage temperature                   | $T_{stg}$ |                                             | -40 to +150 | $^{\circ}C$ |

\* Out put current of centertap full wave connection.

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

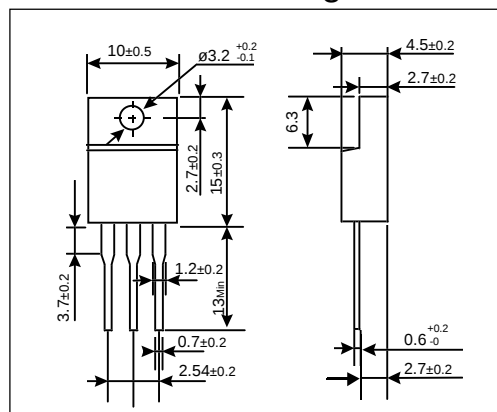
| Item                    | Symbol        | Conditions                          | Max. | Unit          |
|-------------------------|---------------|-------------------------------------|------|---------------|
| Forward voltage drop ** | $V_F$         | $I_F=10A$                           | 0.98 | V             |
| Reverse current **      | $I_R$         | $V_R=V_{RRM}$                       | 200  | $\mu A$       |
| Reverse recovery time   | $t_{rr}$      | $I_F=0.1A, I_R=0.2A, I_{rec}=0.05A$ | 40   | ns            |
| Thermal resistance      | $R_{th(j-c)}$ | Junction to case                    | 2.5  | $^{\circ}C/W$ |

\*\* Rating per element

- Mechanical Characteristics

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

### Outline Drawings

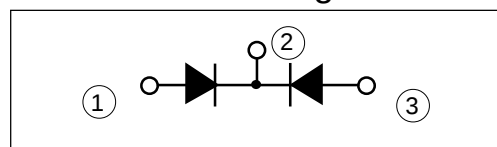


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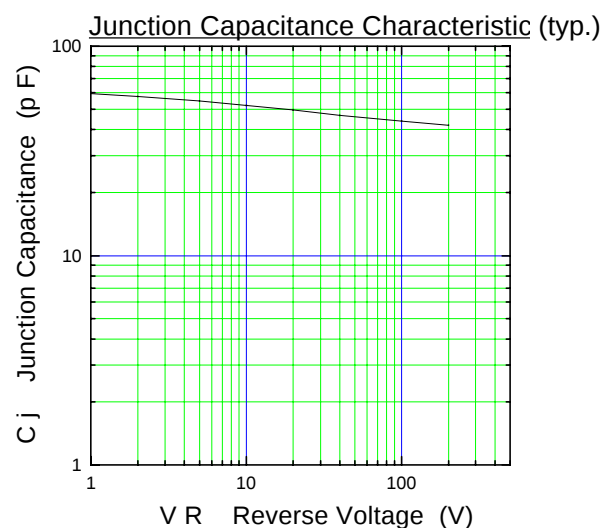
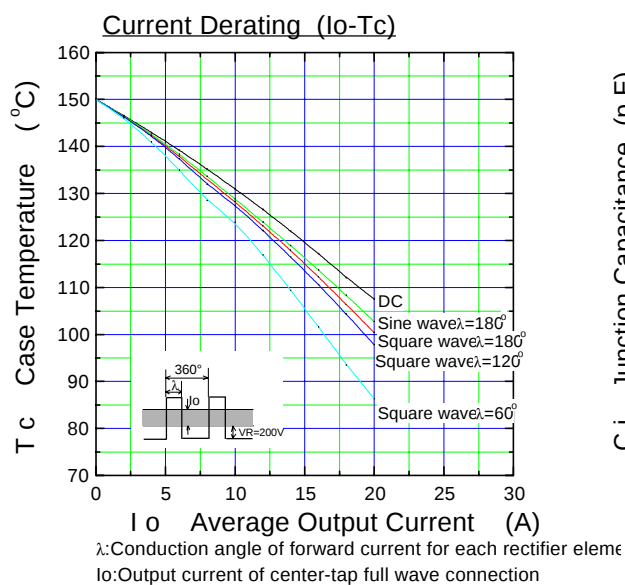
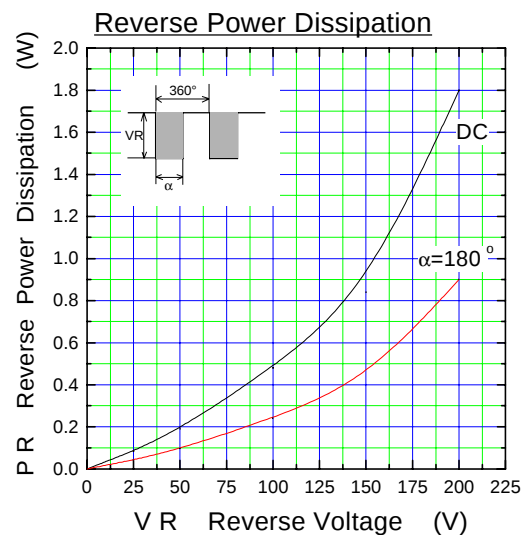
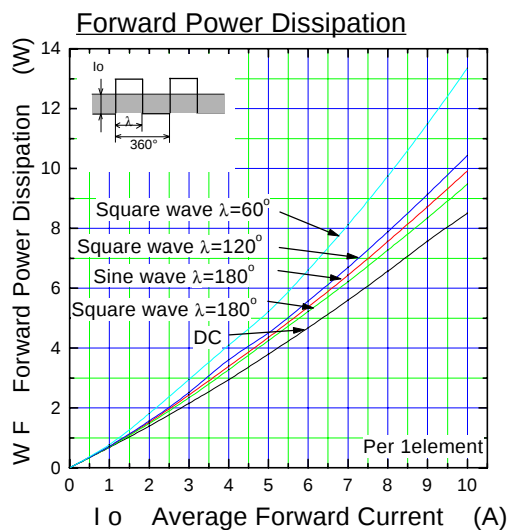
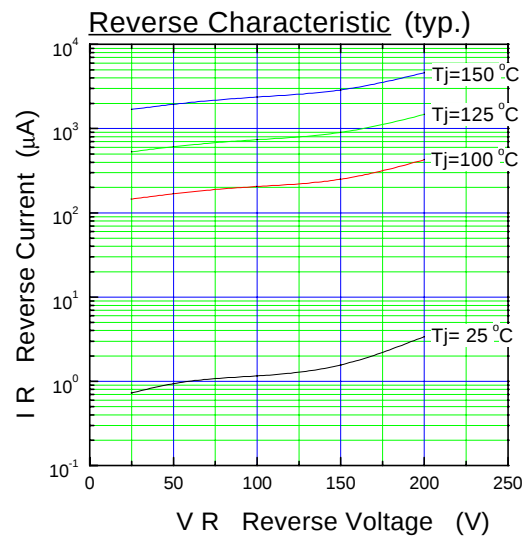
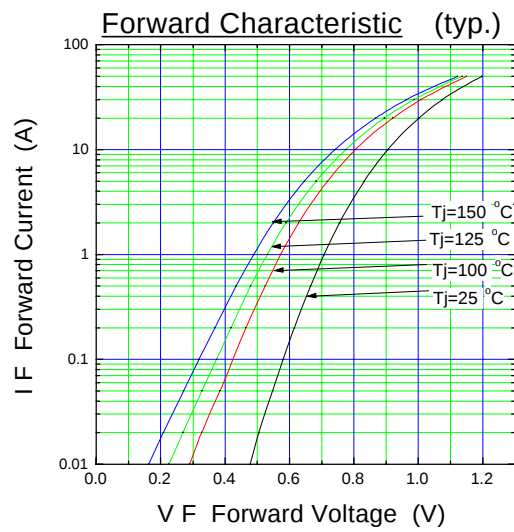
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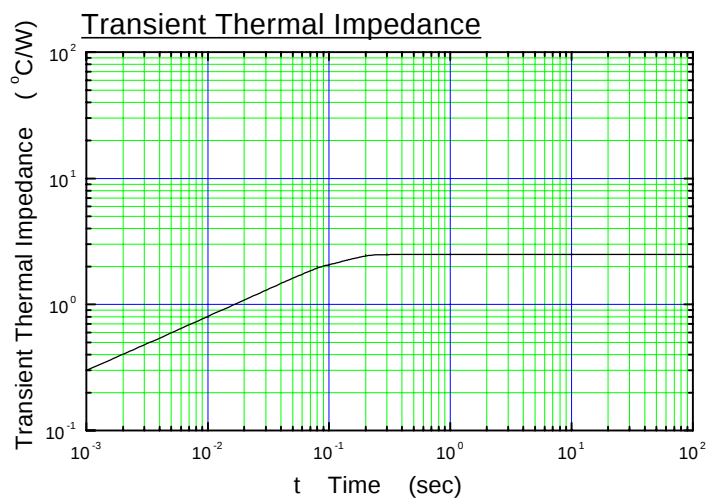
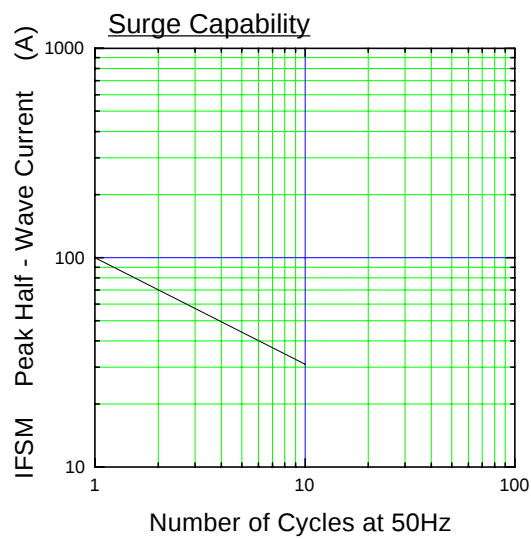
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### Connection Diagram



## Characteristics





**DERATING**

