

# YG868C15R (30A)

(150V / 30A )

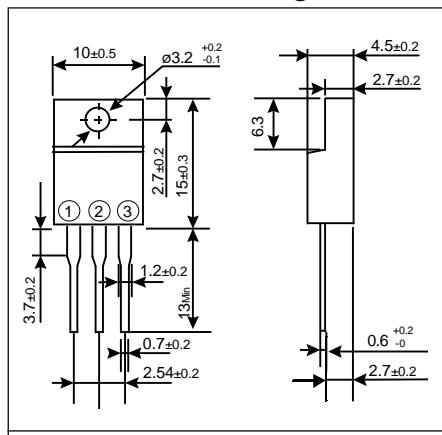
[0401]

## High Voltage Schottky barrier diode

### ■ Major characteristics

| Characteristics  | YG868C15R | Units | Condition                 |
|------------------|-----------|-------|---------------------------|
| V <sub>RRM</sub> | 150       | V     |                           |
| V <sub>F</sub>   | 0.90      | V     | T <sub>c</sub> =25°C MAX. |
| I <sub>O</sub>   | 30        | A     |                           |

### ■ Outline drawings, mm



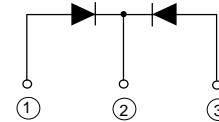
Package : TO-220F  
Epoxy resin UL : V-0

### ■ Features

- Low VF
- High Voltage
- Center tap connection
- High frequency operation
- DC-DC converters
- AC adapter

### ■ Applications

### ■ Connection diagram



### ■ Maximum ratings and characteristics

- Absolute maximum ratings (at T<sub>c</sub>=25°C Unless otherwise specified )

| Item                                  | Symbol           | Conditions                                     | Rating      | Unit |
|---------------------------------------|------------------|--|-------------|------|
| Repetitive peak surge reverse voltage | V <sub>RSM</sub> | t <sub>w</sub> =500ns, duty=1/40               | 150         | V    |
| Repetitive peak reverse voltage       | V <sub>RRM</sub> |  | 150         | V    |
| Isolating voltage                     | V <sub>iso</sub> | Terminals-to-Case,<br>AC.1min                  | 1500        | V    |
| Average output current                | I <sub>O</sub>   | Square wave, duty=1/2<br>T <sub>c</sub> =112°C | 30 *        | A    |
| Non-repetitive surge current **       | I <sub>FSM</sub> | Sine wave<br>10ms 1shot                        | 225         | A    |
| Operating junction temperature        | T <sub>j</sub>   |  | +150        | °C   |
| Storage temperature                   | T <sub>stg</sub> |  | -40 to +150 | °C   |

\* Out put current of center tap full wave connection

\*\*Rating per element

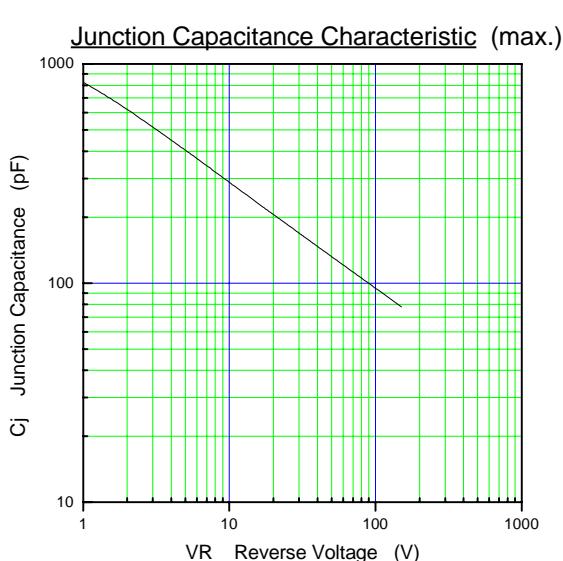
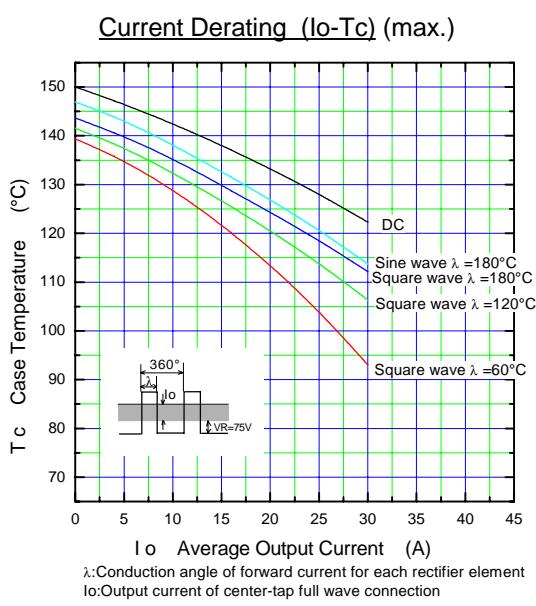
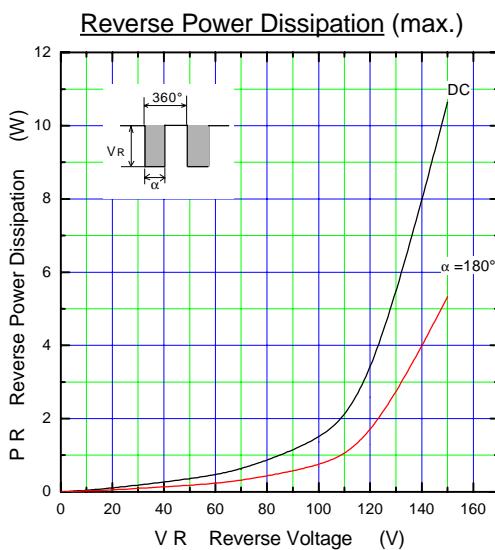
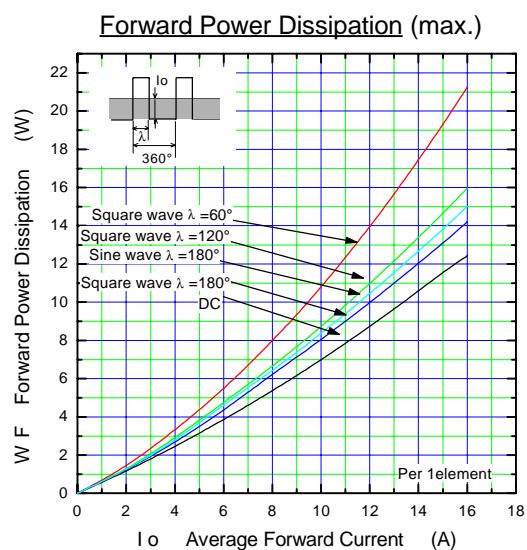
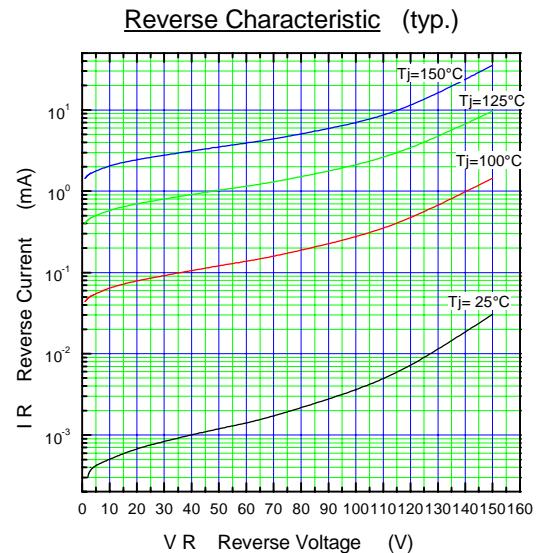
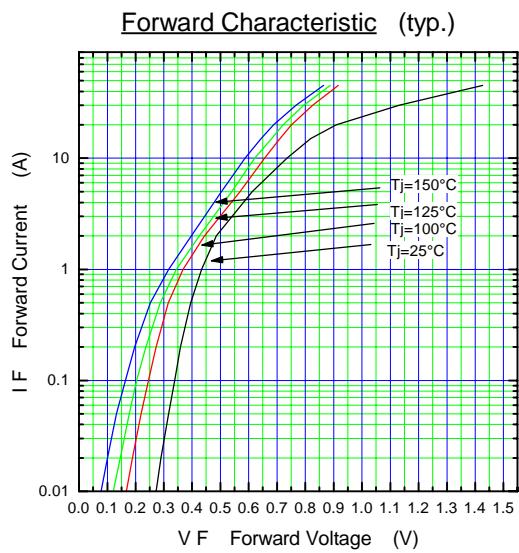
- Electrical characteristics (at T<sub>c</sub>=25°C Unless otherwise specified )

| Item                 | Symbol               | Conditions                       | Max. | Unit |
|----------------------|----------------------|----------------------------------|------|------|
| Forward voltage drop | V <sub>F</sub>       | I <sub>FM</sub> =15A             | 0.90 | V    |
| Reverse current      | I <sub>R</sub>       | V <sub>R</sub> =V <sub>RRM</sub> | 200  | μA   |
| Thermal resistance   | R <sub>th(j-c)</sub> | Junction to case                 | 1.2  | °C/W |

- Mechanical characteristics

|                  |                    |            |     |
|------------------|--------------------|------------|-----|
| Mounting torque  | Recommended torque | 0.3 to 0.5 | N·m |
| Approximate mass |                    | 2          | g   |

## ■ Characteristics



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

