

# YG811S04R

(40V / 5A TO-220F15)

## SCHOTTKY BARRIER 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       | $V_{RRM}$ |  | 40          | V          |
| Repetitive peak surge reverse voltage | $V_{RSM}$ | $t_w=500ns, duty=1/40$                     | 48          | V          |
| Isolating voltage                     | $V_{iso}$ | Terminals to Case, AC. 1min.               | 1500        | V          |
| Average output current                | $I_o$     | duty=1/2, $T_c=122^\circ C$<br>Square wave | 5           | A          |
| Surge current                         | $I_{FSM}$ | Sine wave 10ms                             | 120         | A          |
| Operating junction temperature        | $T_j$     |  | -40 to +150 | $^\circ C$ |
| Storage temperature                   | $T_{stg}$ |  | -40 to +150 | $^\circ C$ |

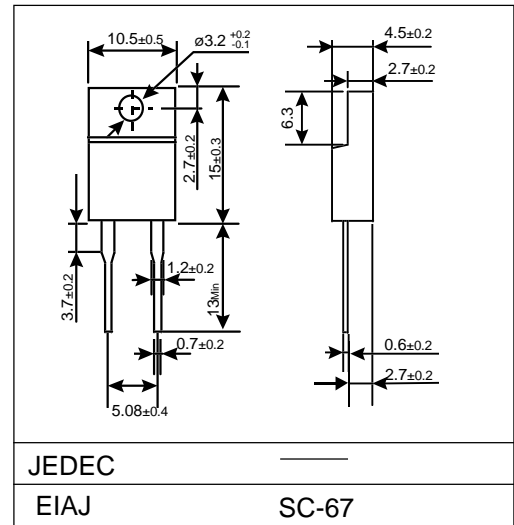
- Electrical Characteristics ( $T_a=25^\circ C$  Unless otherwise specified )

| Item                 | Symbol        | Conditions       | Max. | Unit         |
|----------------------|---------------|------------------|------|--------------|
| Forward voltage drop | $V_F$         | $I_F=5.0A$       | 0.55 | V            |
| Reverse current      | $I_R$         | $V_R=V_{RRM}$    | 5.0  | mA           |
| Thermal resistance   | $R_{th(j-c)}$ | Junction to case | 5.0  | $^\circ C/W$ |

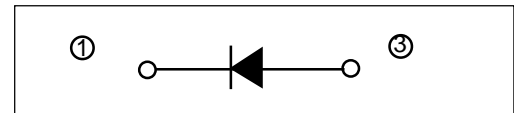
- Mechanical Characteristics

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

### ■ Outline Drawings



### ■ Connection Diagram



**Characteristics**

