

# YG808C10R

(100V / 30A 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       | $V_{RRM}$ |  | 100         | V          |
| Repetitive peak surge reverse voltage | $V_{RSM}$ | $t_w=500ns$ , $duty=1/40$                    | 100         | V          |
| Isolation voltage                     | $V_{iso}$ | Terminals to Case, AC, 1min.                 | 1500        | V          |
| Average output current                | $I_O$     | $duty=1/2$ , $T_c=80^\circ C$<br>Square wave | 30*         | A          |
| Surge current                         | $I_{FSM}$ | Sine wave 10ms                               | 180         | A          |
| Operating junction temperature        | $T_j$     |  | +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)

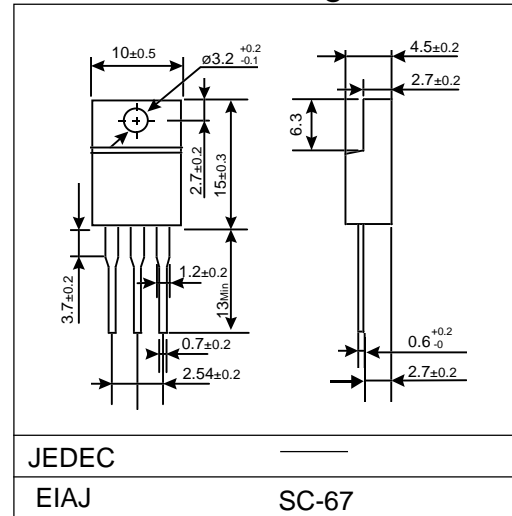
| Item                    | Symbol        | Conditions       | Max. | Unit         |
|-------------------------|---------------|------------------|------|--------------|
| Forward voltage drop ** | $V_F$         | $I_F=10A$        | 0.80 | V            |
| Reverse current **      | $I_R$         | $V_R=V_{RRM}$    | 20.0 | mA           |
| Thermal resistance      | $R_{th(j-c)}$ | Junction to case | 2.0  | $^\circ C/W$ |

\*\* Rating per element

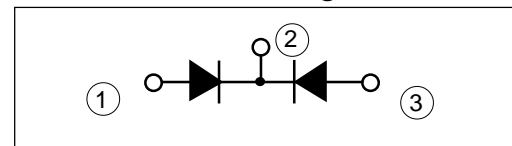
- Mechanical Characteristics

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

### Outline Drawings



### Connection Diagram



■ Characteristics

