

# YG805C06R

(60V / 20A 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       | $V_{RRM}$ |  | 60          | V                |
| Repetitive peak surge reverse voltage | $V_{RSM}$ | $t_w=500\text{ns}$ , $\text{duty}=1/40$                          | 60          | V                |
| Isolation voltage                     | $V_{iso}$ | Terminals to Case, AC, 1min.                                     | 1500        | V                |
| Average output current                | $I_o$     | $\text{duty}=1/2$ , $T_c= \text{ }^\circ\text{C}$<br>Square wave | 20*         | A                |
| Surge current                         | $I_{FSM}$ | Sine wave 10ms   | 120         | A                |
| Operating junction temperature        | $T_j$     |  | -40 to +150 | $^\circ\text{C}$ |
| Storage temperature                   | $T_{stg}$ |  | -40 to +150 | $^\circ\text{C}$ |

\* Out put current of centertap full wave connection.

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

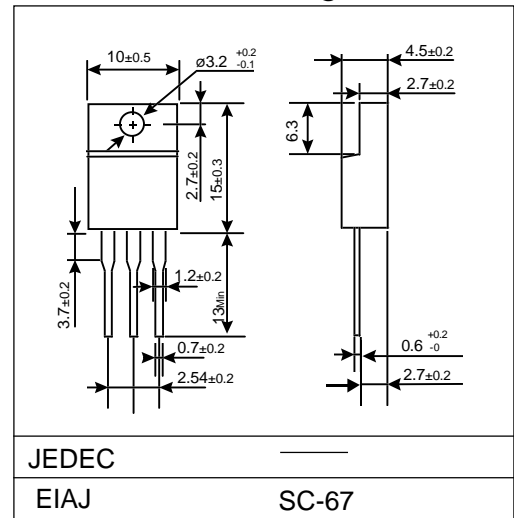
| Item                    | Symbol        | Conditions       | Max. | Unit               |
|-------------------------|---------------|------------------|------|--------------------|
| Forward voltage drop ** | $V_F$         | $I_F=8\text{A}$  | 0.58 | V                  |
| Reverse current **      | $I_R$         | $V_R=V_{RRM}$    | 15   | mA                 |
| Thermal resistance      | $R_{th(j-c)}$ | Junction to case | 2.5  | $^\circ\text{C/W}$ |

\*\* Rating per element

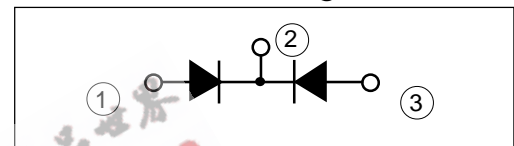
- Mechanical Characteristics

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

### Outline Drawings



### Connection Diagram



Characteristics

