

# YG803C06R (15A)

60V / 15A )

## Schottky barrier diode

### Major characteristics

| Characteristics | YG803C06 | Units | Condition                       |
|-----------------|----------|-------|---------------------------------|
| $V_{RRM}$       | 60       | V     |                                 |
| $V_F$           | 0.48     | V     | $T_j=125^{\circ}\text{C}$ , typ |
| $I_o$           | 15       | A     |                                 |

### Features

- Low  $V_F$
- Optimized for 3.3V
- 5V output application
- Center tap connection

### Applications

- High frequency operation
- DC-DC converters
- AC adapter

### Maximum ratings and characteristics

- Absolute maximum ratings

| Item                                  | Symbol    | Conditions                                                 | Rating      | Unit               |
|---------------------------------------|-----------|------------------------------------------------------------|-------------|--------------------|
| Repetitive peak surge reverse voltage | $V_{RSM}$ | $t_w=500\text{ns}$ , $\text{duty}=1/40$                    | 60          | V                  |
| Repetitive peak reverse voltage       | $V_{RRM}$ |                                                            | 60          | V                  |
| Isolating voltage                     | $V_{iso}$ | Terminals-to-Case, AC.1min                                 | 1500        | V                  |
| Average output current                | $I_o$     | Square wave, $\text{duty}=1/2$<br>$T_c=94^{\circ}\text{C}$ | 15 *        | A                  |
| Non-repetitive surge current          | $I_{FSM}$ | Sine wave<br>10ms, 1shot                                   | 100         | A                  |
| Operating junction temperature        | $T_j$     |                                                            | +150        | $^{\circ}\text{C}$ |
| Storage temperature                   | $T_{stg}$ |                                                            | -40 to +150 | $^{\circ}\text{C}$ |

\* Average output current at centertap full wave connection

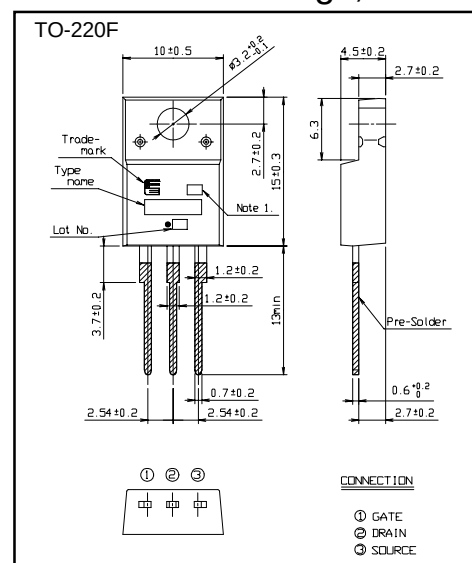
- Electrical characteristics ( $T_c=25^{\circ}\text{C}$  Unless otherwise specified )

| Item                 | Symbol | Conditions         | Max. | Unit |
|----------------------|--------|--------------------|------|------|
| Forward voltage drop | $V_F$  | $I_{FM}=6\text{A}$ | 0.58 | V    |
| Reverse current      | $I_R$  | $V_R=V_{RRM}$      | 5.0  | mA   |

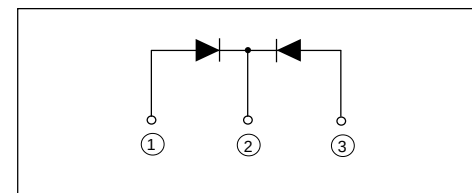
- Electrical characteristics ( $T_c=25^{\circ}\text{C}$  Unless otherwise specified )

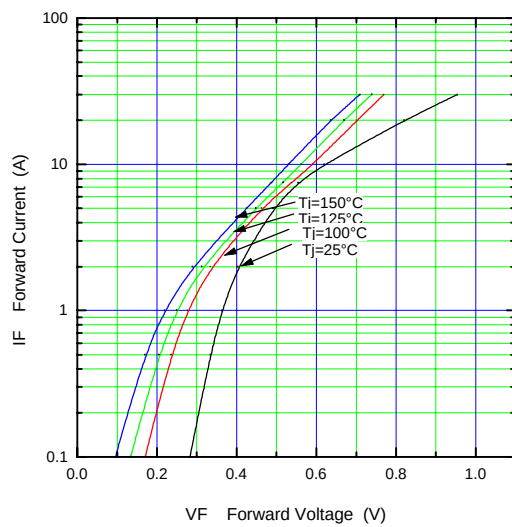
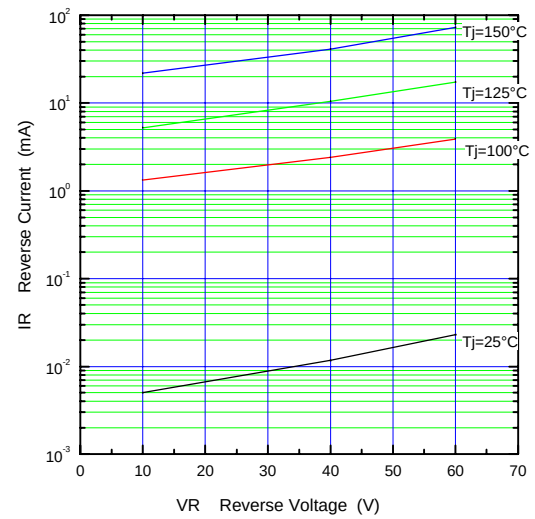
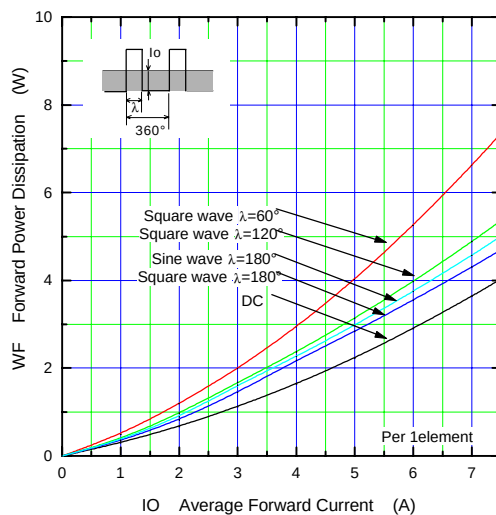
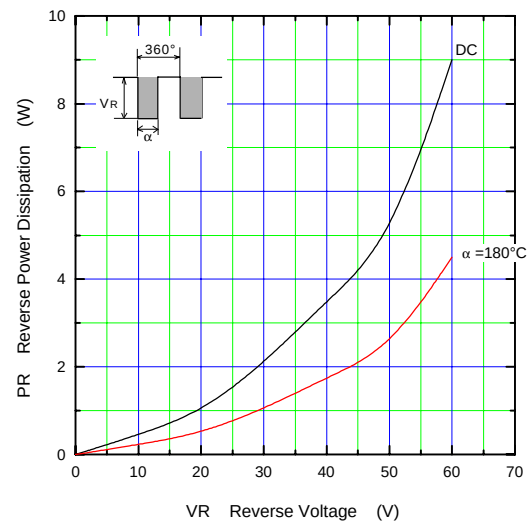
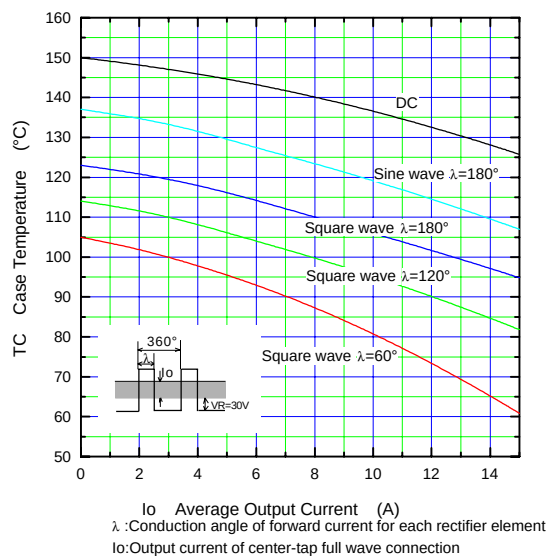
| Item               | Symbol        | Condition        | Max. | Unit                 |
|--------------------|---------------|------------------|------|----------------------|
| Thermal resistance | $R_{th(j-c)}$ | Junction to case | 3.0  | $^{\circ}\text{C/W}$ |

### Outline drawings, mm



### Connection diagram



**■ Characteristics****Forward Characteristic (typ.)****Reverse Characteristic (typ.)****Forward Power Dissipation****Reverse Power Dissipation****Current Derating (Io-Tc)****Junction Capacitance Characteristic(typ.)**