

YG803C06 (15A)

(60V / 15A)

Schottky barrier diode

■ Major characteristics

| Characteristics | YG803C06 | Units | Condition |
|-----------------|----------|-------|---------------|
| V_{RRM} | 60 | V | |
| V_F | 0.48 | V | Tj=125°C, typ |
| I_o | 15 | A | |

■ Features

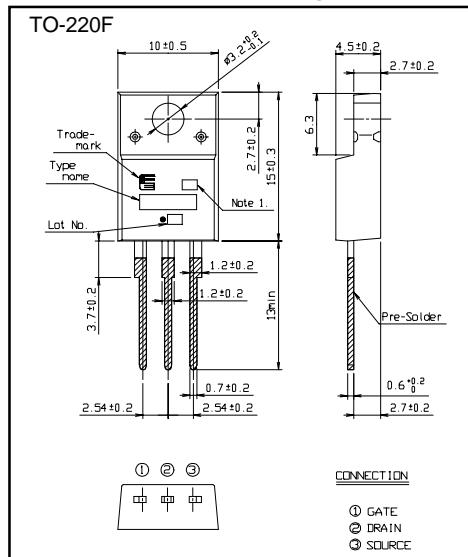
- Low VF
 - Optimized for 3.3V
 - 5V output application
 - Center tap connection
 - High frequency operation
 - DC-DC converters
 - AC adapter

■ Applications

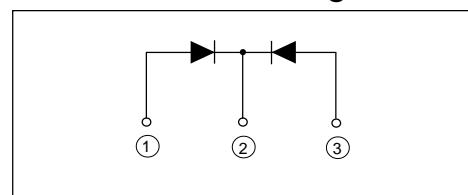
- High frequency operation
 - DC-DC converters
 - AC adapter

■ Maximum ratings and characteristics

- Absolute maximum ratings



■ Connection diagram



| Item | Symbol | Conditions | Rating | Unit |
|---------------------------------------|-----------|---|-------------|------------------|
| Repetitive peak surge reverse voltage | V_{RSM} | $t_w=500\text{ns}$, 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, duty=1/2 $T_c=94^\circ\text{C}$ | 15 * | A |
| Non-repetitive surge current | I_{FSM} | Sine wave 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)

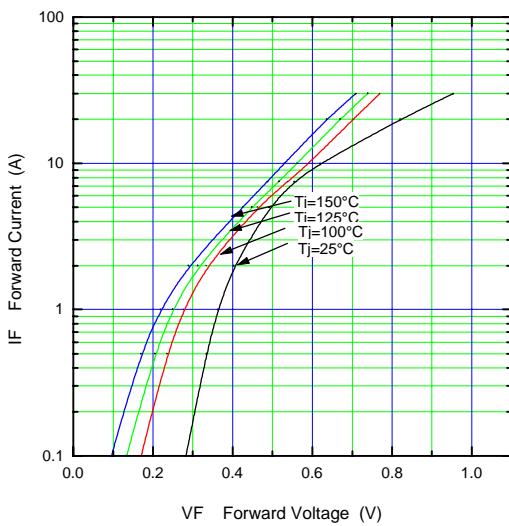
| Item | Symbol | Conditions | Max. | Unit |
|----------------------|--------|---------------|------|------|
| Forward voltage drop | V_F | $I_{FM}=6A$ | 0.58 | V |
| Reverse current | I_R | $V_R=V_{RRM}$ | 5.0 | mA |

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

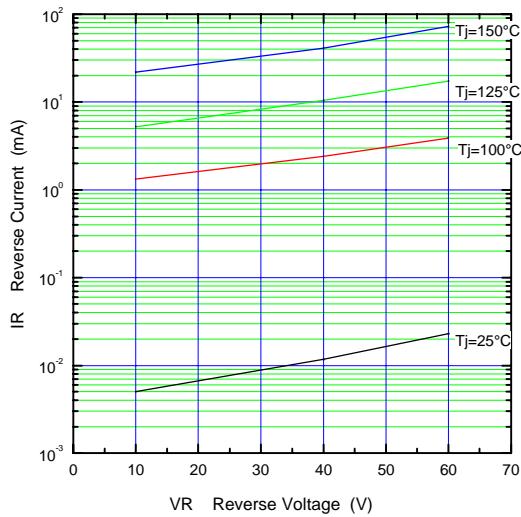
| Item | Symbol | Condition | Max. | Unit |
|--------------------|----------------------|------------------|------|------|
| Thermal resistance | R _{th(j-c)} | Junction to case | 3.0 | °C/W |

■ Characteristics

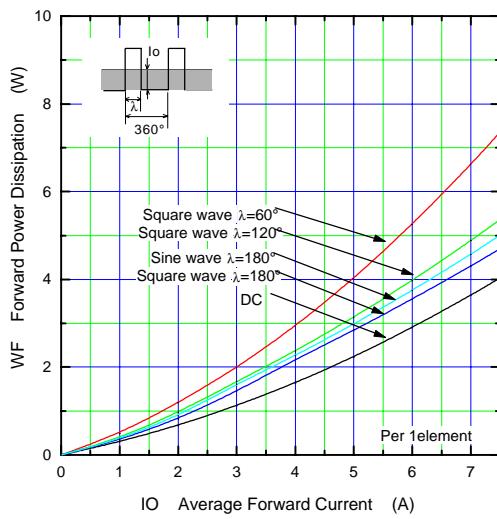
Forward Characteristic (typ.)



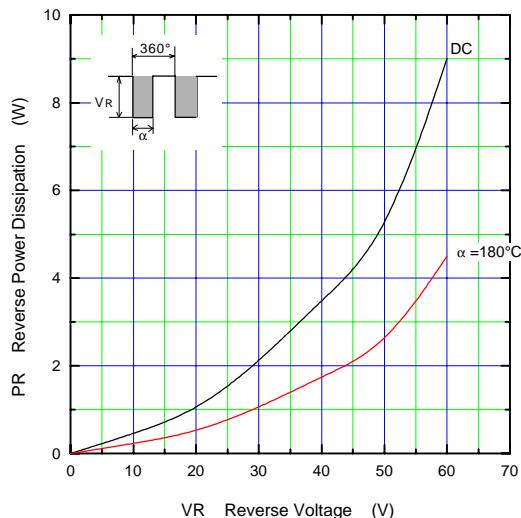
Reverse Characteristic (typ.)



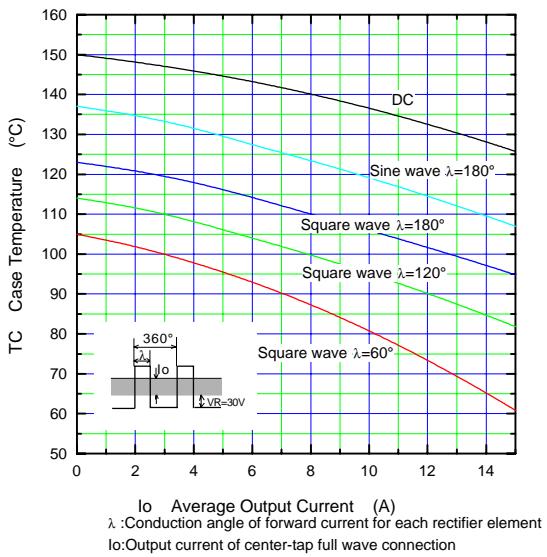
Forward Power Dissipation



Reverse Power Dissipation



Current Derating (Io-Tc)



Junction Capacitance Characteristic(typ.)

