

YG832C03R

(30V / 10A 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} | | 30 | V |
| Repetitive peak surge reverse voltage | V_{RSM} | $t_w=500\text{ns}$, duty=1/40 | 35 * ₁ | V |
| Isolation voltage | V_{iso} | Terminals to Case, AC, 1min. | 1500 | V |
| Average output current | I_o | duty=1/2, $T_c=122^\circ\text{C}$ Square wave | 10* | A |
| Surge current | I_{FSM} | Sine wave 10ms | 120 | A |
| Operating junction temperature | T_j | | +150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | | -40 to +150 | $^\circ\text{C}$ |

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

* Out put current of centertap full wave connection.

*₁ : Tentative

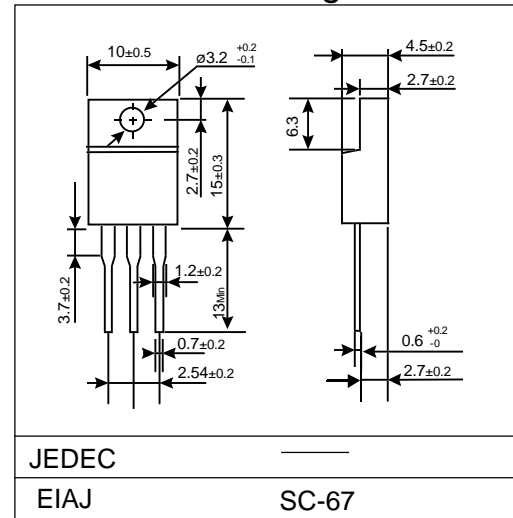
| Item | Symbol | Conditions | Max. | Unit |
|-------------------------|---------------|-------------------|------|--------------------|
| Forward voltage drop ** | V_F | $I_F=4.0\text{A}$ | 0.45 | V |
| Reverse current ** | I_R | $V_R=V_{RRM}$ | 5.0 | mA |
| Thermal resistance | $R_{th(j-c)}$ | Junction to case | 3.5 | $^\circ\text{C/W}$ |

** Rating per element

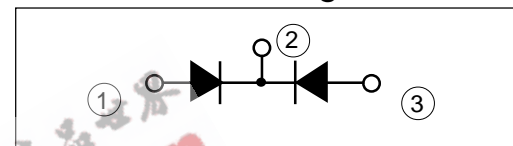
- Mechanical Characteristics

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

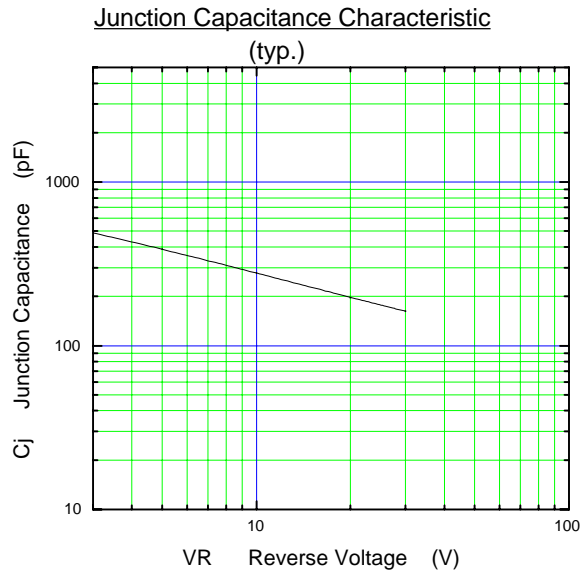
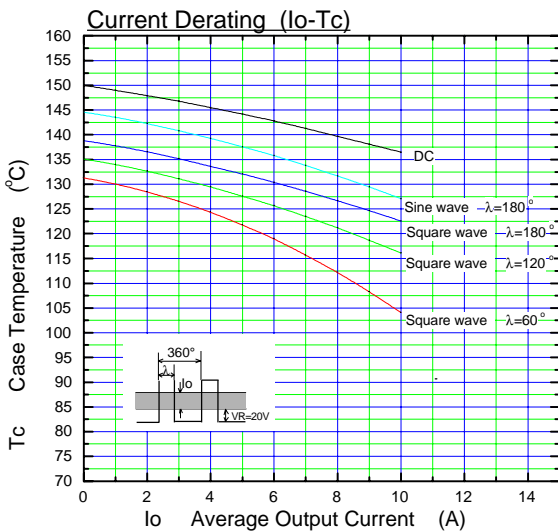
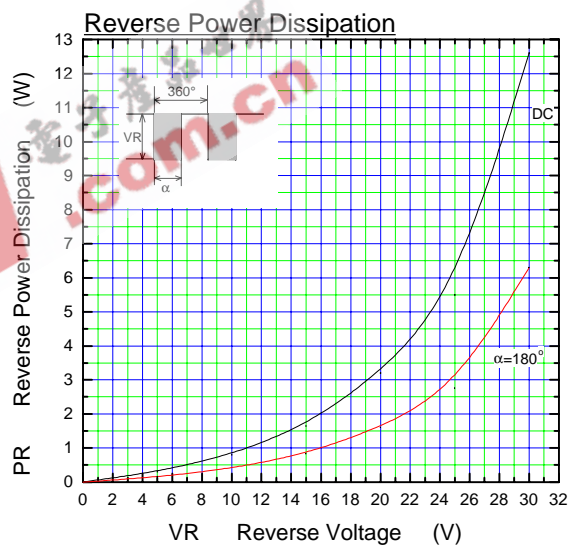
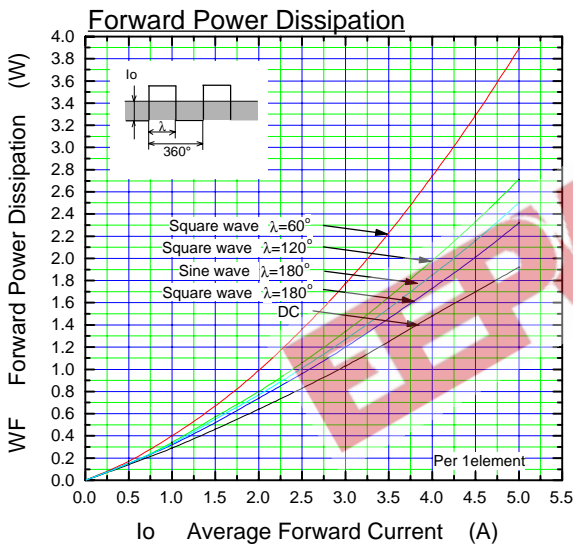
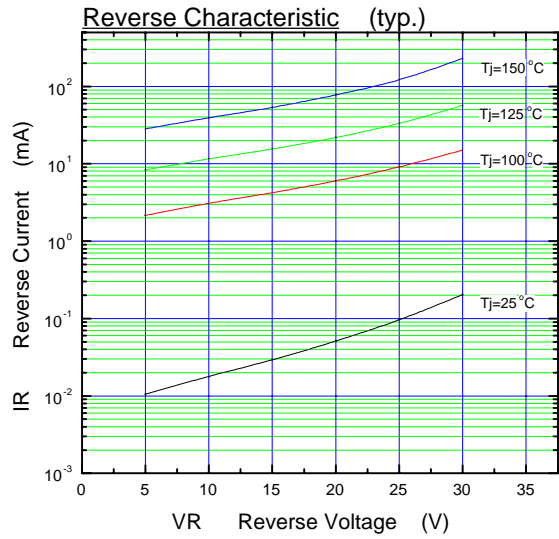
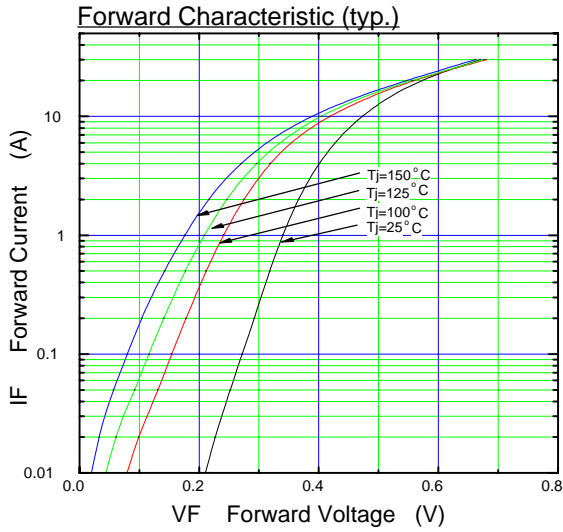
Outline Drawings



Connection Diagram



Characteristics



λ: Conduction angle of forward current for each rectifier element
Io: Output current of center-tap full wave connection

