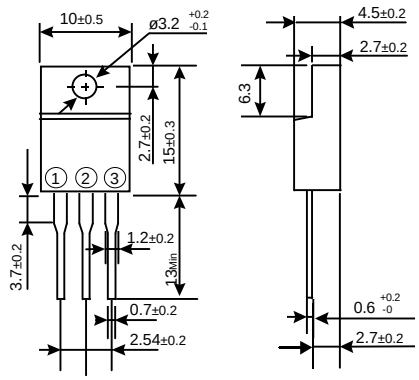
# YG802C03R (30V / 10A TO-22OF15)

## SCHOTTKY BARRIER DIODE

## ■ Outline Drawings




| | |
|---|---|
| JEDEC | ——— |
| EIAJ | SC-67 |

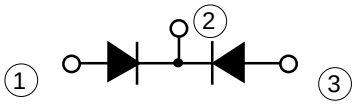
## ■ Features

- Low $V_F$
- Super high speed switching.
- High reliability by planer design.

## ■ Applications

- High speed power switching.

## ■ Connection Diagram




## ■ 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 | $V_{RSM}$ | tw=500ns, duty=1/40 | 30 | V |
| Isolating voltage | $V_{iso}$ | Terminals to Case, AC. 1min. | 1500 | V |
| Average output current | $I_O$ | duty=1/2, Tc=125°C Square wave | 10* | A |
| Suege current | $I_{FSM}$ | Sine wave 10ms | 120 | A |
| Operating junction temperature | $T_j$ | | +150 | °C |
| Storage temperature | $T_{stg}$ | | -40 to +150 | °C |

* Out put current of centertap full wave connection.

- Electrical Characteristics (Ta=25°C Unless otherwise specified )

| Item | Symbol | Conditions | Max. | Unit |
|---|---|---|---|---|
| Forward voltage drop ** | $V_F$ | $I_F$=4.0A | 0.47 | V |
| Reverse current ** | $I_R$ | $V_R=V_{RRM}$ | 5.0 | mA |
| Thermal resistance | $R_{th(j-c)}$ | Junction to case | 3.5 | °C/W |

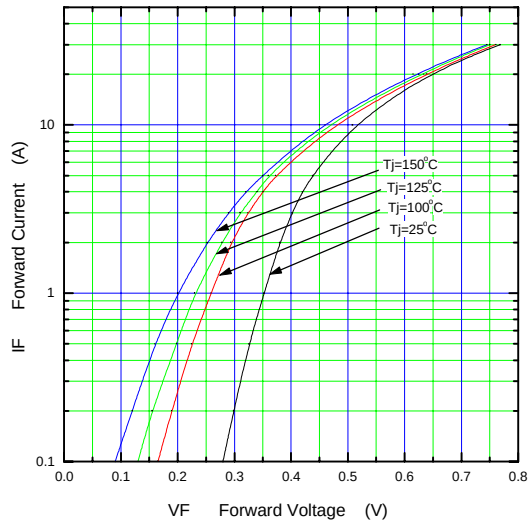
** Rating per element

- Mechanical Characteristics

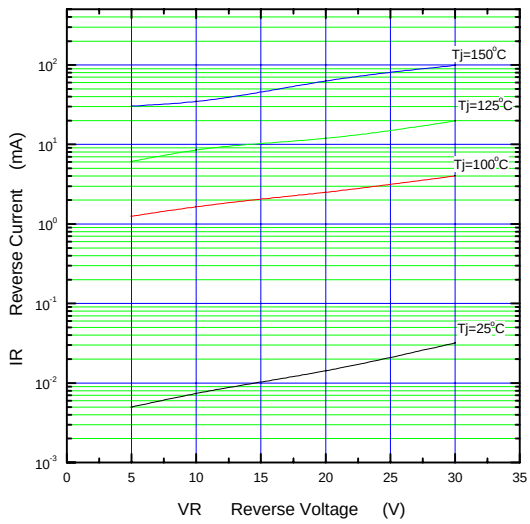
| | | | |
|---|---|---|---|
| Mounting torque | Recommended torque | 0.3 to 0.5 | N · m |
| Weight | | 2.3 | g |

## ■ Characteristics

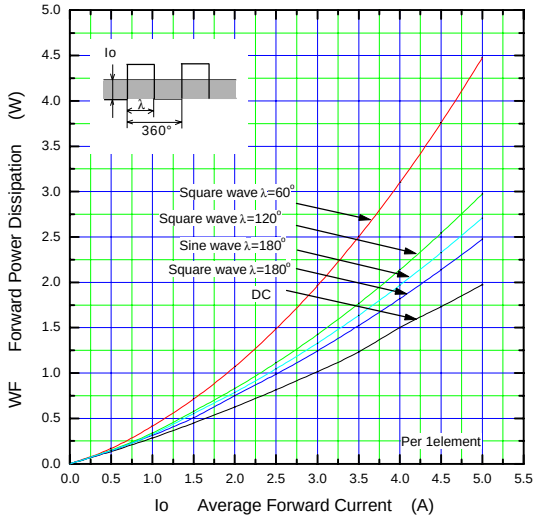
Forward Characteristic (typ.)



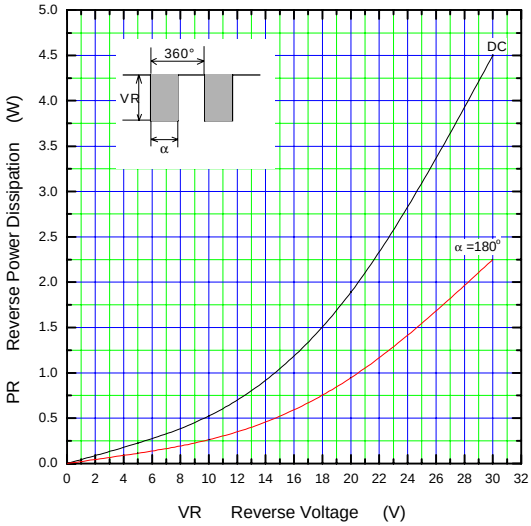

Reverse Characteristic (typ.)



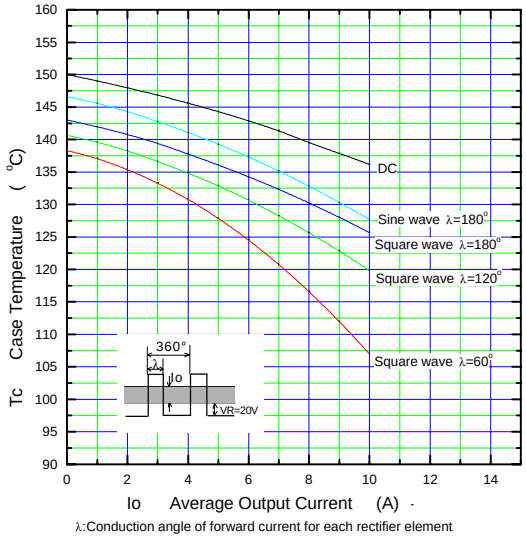

Forward Power Dissipation




Reverse Power Dissipation

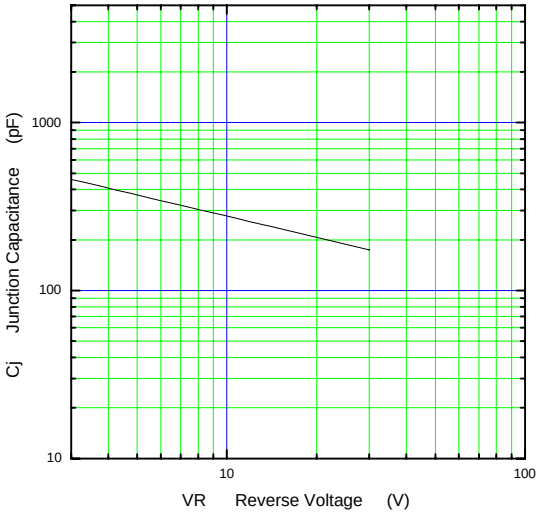



Current Derating (Io-Tc)

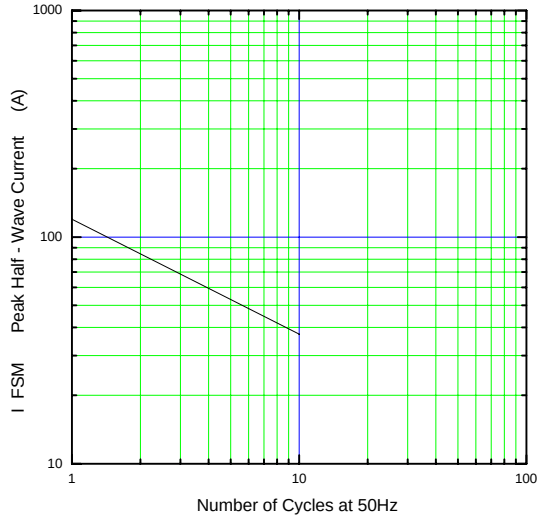



λ:Conduction angle of forward current for each rectifier element
Io:Output current of center-tap full wave connection

Junction Capacitance Characteristic (typ.)



Surge Capability




Transient Thermal Impedance

