# YA862C10R (100V / 10A)

Fuji Electric

[200509]

## Low IR Schottky barrier diode

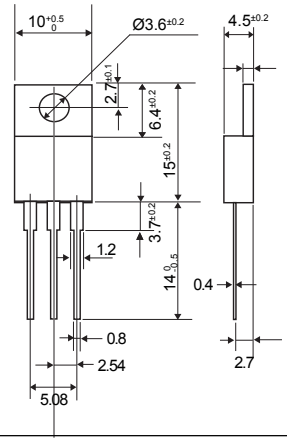
## ■ Features

- Low IR
- Low $V_F$
- Center tap connection

## ■ Applications

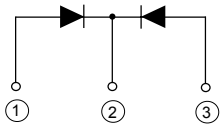
- High frequency operation
- DC-DC converters
- AC adapter

## ■ Outline drawings, mm




Package : TO-220AB
Epoxy resin UL : V-0

## ■ Connection diagram




## ■ Maximum ratings and characteristics

● Maximum ratings

| Item | Symbol | Conditions | Rating | Unit |
|---|---|---|---|---|
| Repetitive peak surge reverse voltage | $V_{RSM}$ | tw=500ns, duty=1/40 | 100 | V |
| Repetitive peak reverse voltage | $V_{RRM}$ | | 100 | V |
| Isolating voltage | Viso | Terminals-to-Case, AC.1min. | 1500 | V |
| Average output current | Io | Square wave, duty=1/2 Tc=132°C | 10 * | A |
| Non-repetitive surge current | $I_{FSM}$ | Sine wave 10ms | 125 | A |
| non-repetitive reverse surge power dissipation | PRM | tw=10μs, Tj=25°C | 330 | W |
| Operating junction temperature | $T_j$ | | +150 | °C |
| Storage temperature | $T_{stg}$ | | -40 to +150 | °C |

* Out put current of center tap full wave connection

● Electrical characteristics (at Ta=25°C Unless otherwise specified )

| Item | Symbol | Conditions | Max. | Unit |
|---|---|---|---|---|
| Forward voltage ** | $V_F$ | $I_F$=5A | 0.86 | V |
| Reverse current ** | $I_R$ | $V_R$=100V | 150 | μA |
| Thermal resistance | Rth(j-c) | Junction to case | 2.0 | °C/W |

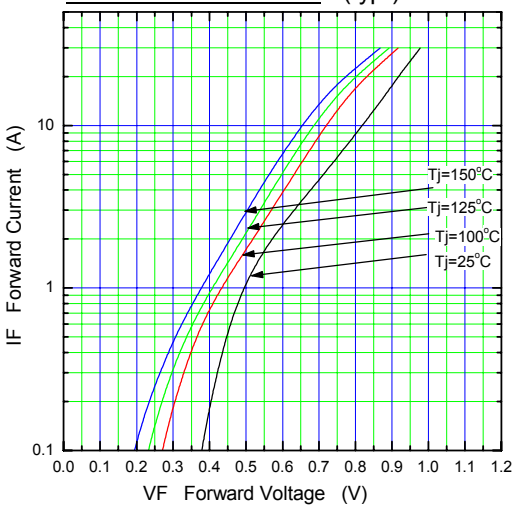
**Rating per element

● Mechanical characteristics

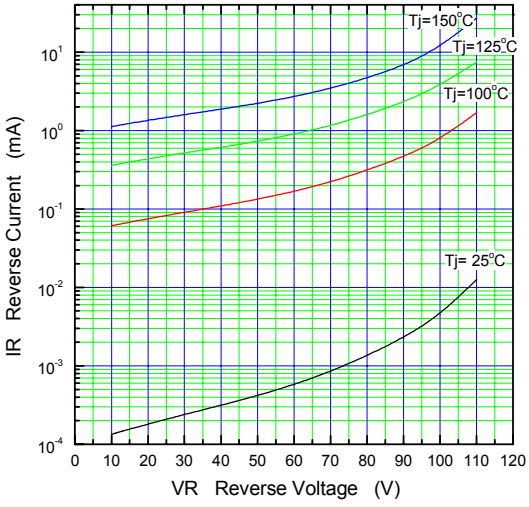
| | | | |
|---|---|---|---|
| Mounting torque | Recommended torque | 0.3 to 0.5 | N·m |
| Approximate mass | | 2 | g |

## ■ Characteristics

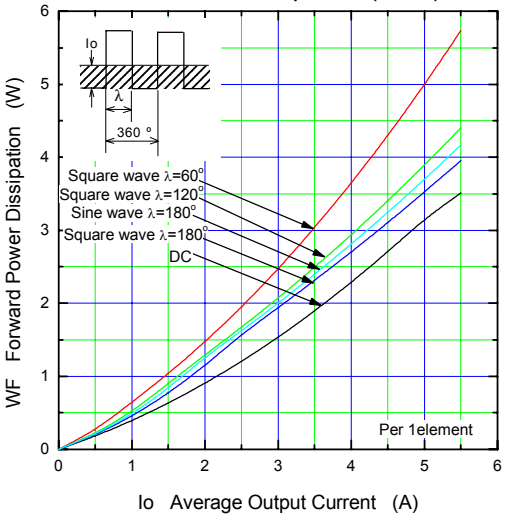
Forward Characteristic (typ.)



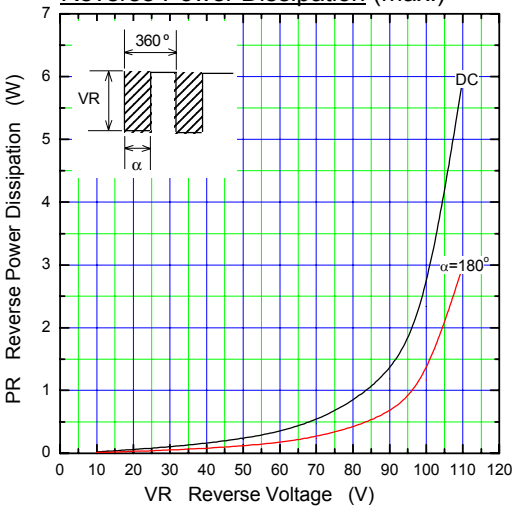

Reverse Characteristic (typ.)



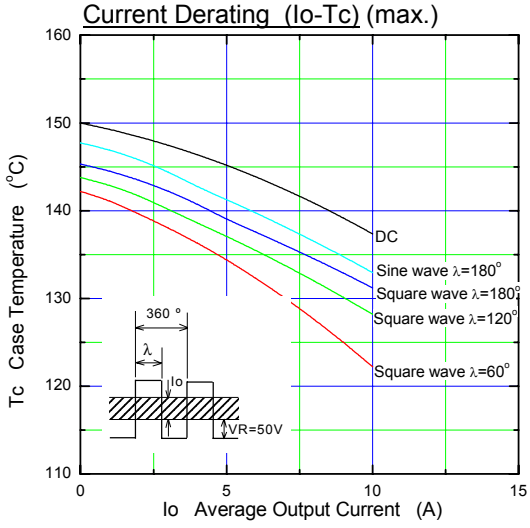

Forward Power Dissipation (max.)




Reverse Power Dissipation (max.)

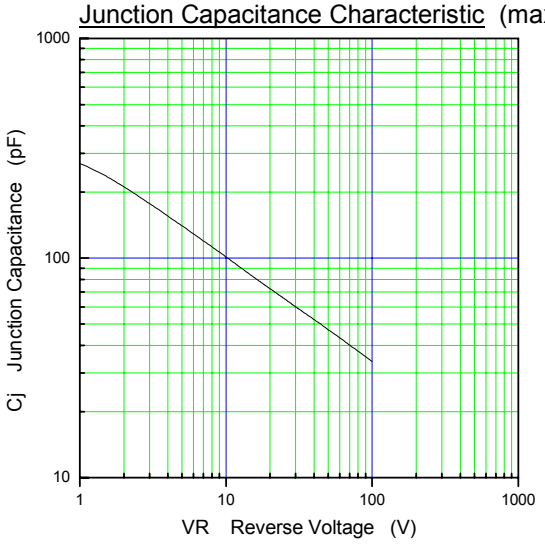



Current Derating (Io-Tc) (max.)

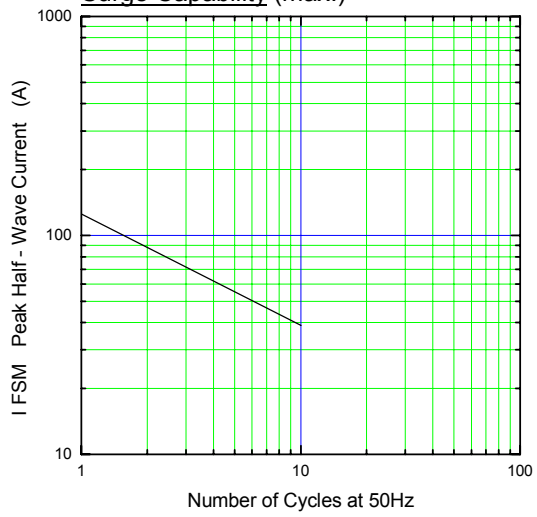



λ:Conduction angle of forward current for each rectifier element
Io:Output current of center-tap full wave connection

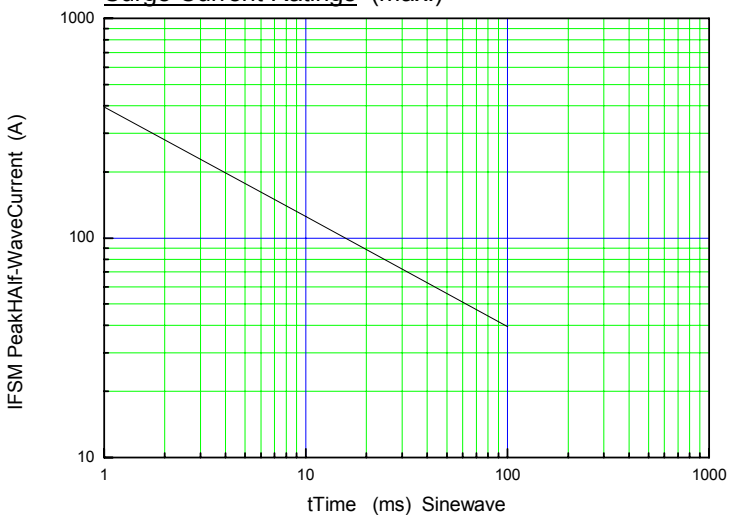
Junction Capacitance Characteristic (max.)



Surge Capability (max.)




Surge Current Ratings (max.)




Transient Thermal Impedance (max.)

