

# YG835C04R

(40V / 22A TO-220F15)

## SCHOTTKY BARRIER DIODE

### ■ Features

- Low VF
- 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 <sub>RRM</sub>		40	V
Repetitive peak surge reverse voltage	V <sub>RSM</sub>	tw=500ns, duty=1/40	40	V
Isolating voltage	V <sub>iso</sub>	Terminals to Case, AC. 1min.	1500	V
Average output current	I <sub>o</sub>	duty=1/2, T <sub>c</sub> =95°C Square wave	22*	A
Surge current	I <sub>FSM</sub>	Sine wave 10ms	120	A
Operating junction temperature	T <sub>j</sub>		+150	°C
Storage temperature	T <sub>stg</sub>		-40 to +150	°C

\* Out put current of centertap full wave connection.

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

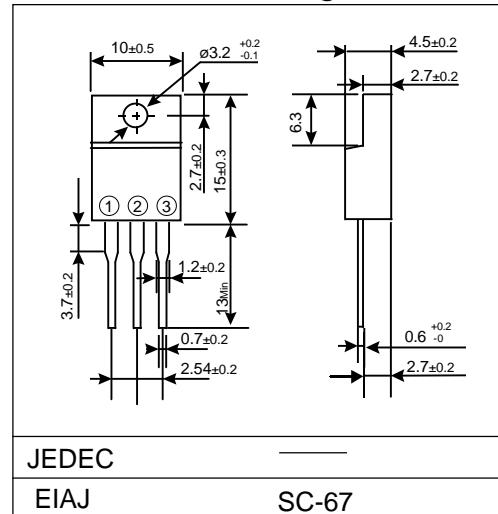
Item	Symbol	Conditions	Max.	Unit
Forward voltage drop **	V <sub>F</sub>	I <sub>F</sub> =6.0A	0.45	V
Reverse current **	I <sub>R</sub>	V <sub>R</sub> =V <sub>RRM</sub>	15.0	mA
Thermal resistance	R <sub>th(j-c)</sub>	Junction to case	2.5	°C/W

\*\* Rating per element

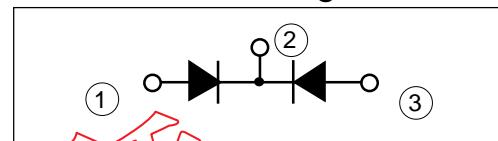
- Mechanical Characteristics

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

### ■ Outline Drawings

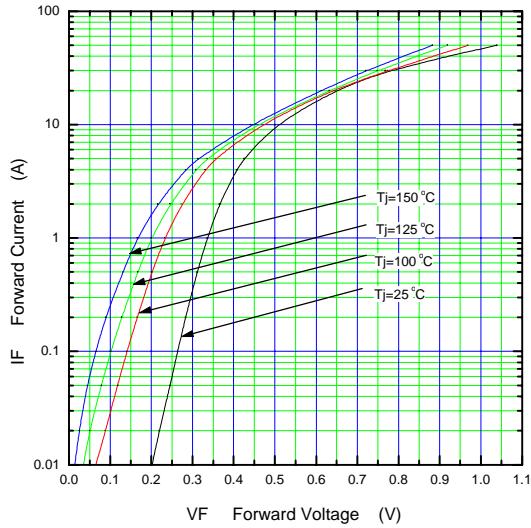


### ■ Connection Diagram

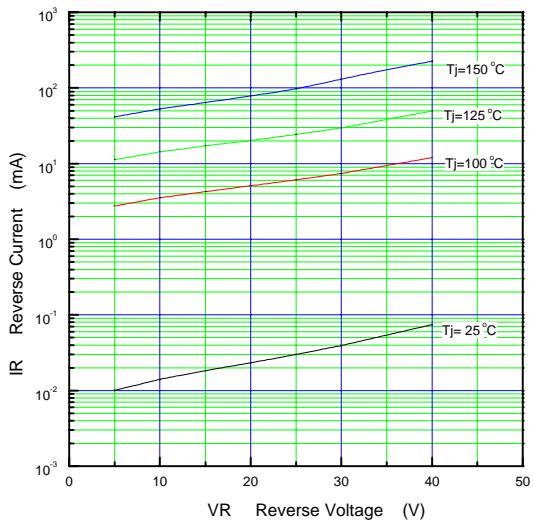


## ■ Characteristics

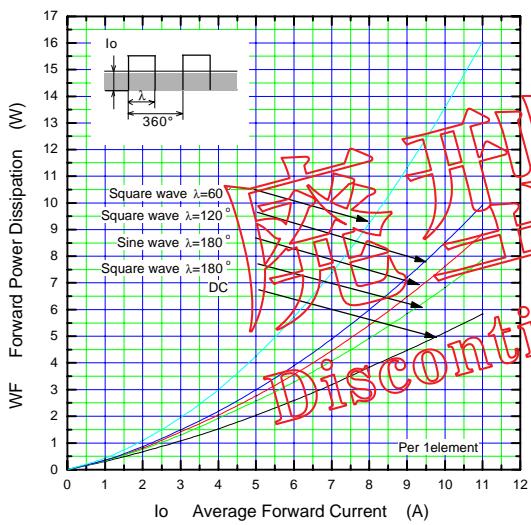
Forward Characteristic (typ.)



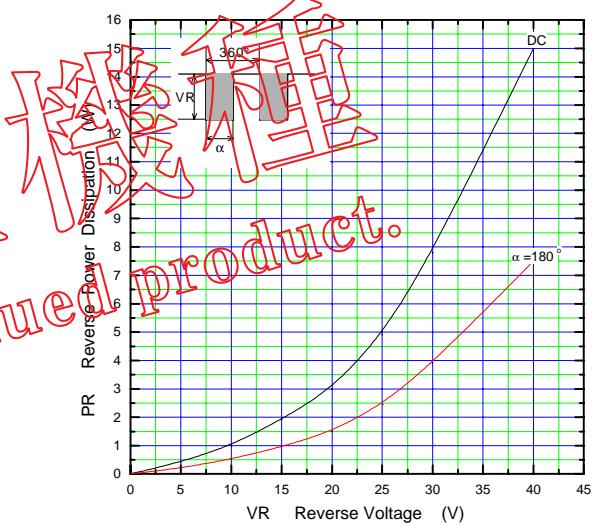
Reverse Characteristic (typ.)



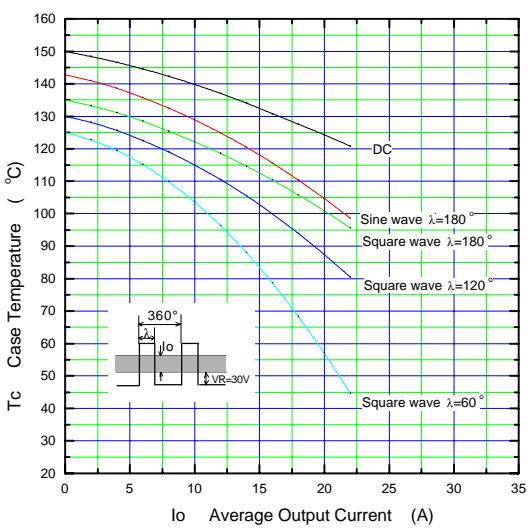
Forward Power Dissipation



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.)

