

# YG805C04R

(40V / 20A 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	$V_{RRM}$		40	V
Repetitive peak surge reverse voltage	$V_{RSM}$	$t_w=500\text{ns}$ , duty=1/40	48	V
Isolation voltage	$V_{iso}$	Terminals to Case, AC. 1min.	1500	V
Average output current	$I_o$	duty=1/2, $T_c=100^\circ\text{C}$ Square wave	20*	A
Surge current	$I_{FSM}$	Sine wave 10ms	120	A
Operating junction temperature	$T_j$		-40 to +150	$^\circ\text{C}$
Storage temperature	$T_{stg}$		-40 to +150	$^\circ\text{C}$

\* Out put current of center tap full wave connection.

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

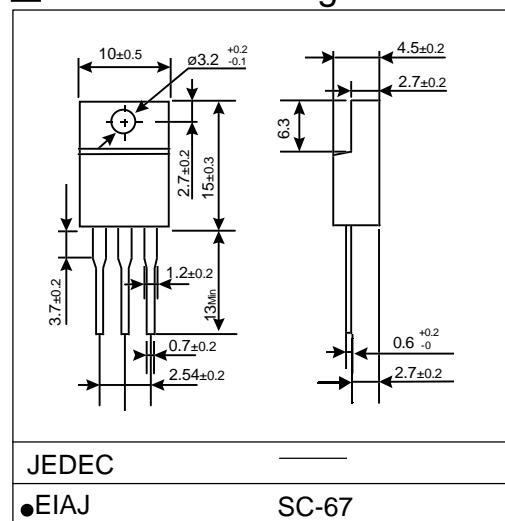
Item	Symbol	Conditions	Max.	Unit
Forward voltage drop **	$V_F$	$I_F=10\text{A}$	0.6	V
Reverse current **	$I_R$	$V_R=V_{RRM}$	15	mA
Thermal resistance	$R_{th(j-c)}$	Junction to case	2.5	$^\circ\text{C}/\text{W}$

\*\* Rating per element

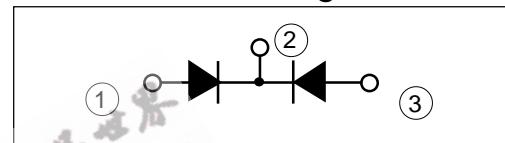
#### • Mechanical Characteristics

Mounting torque	Recommended torque	0.3 to 0.5	$\text{N} \cdot \text{m}$
Weight		2.3	g

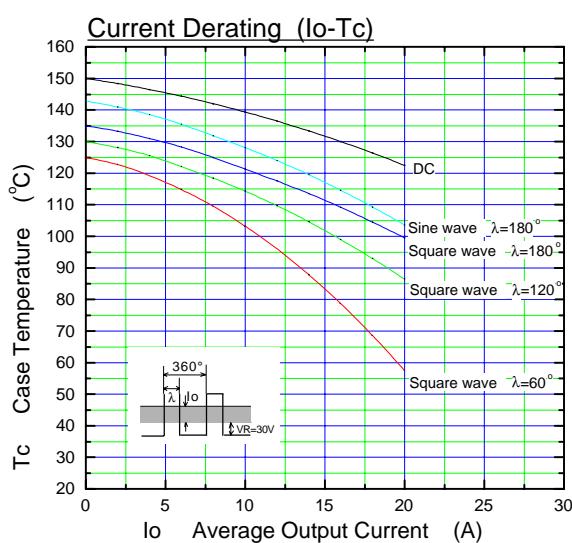
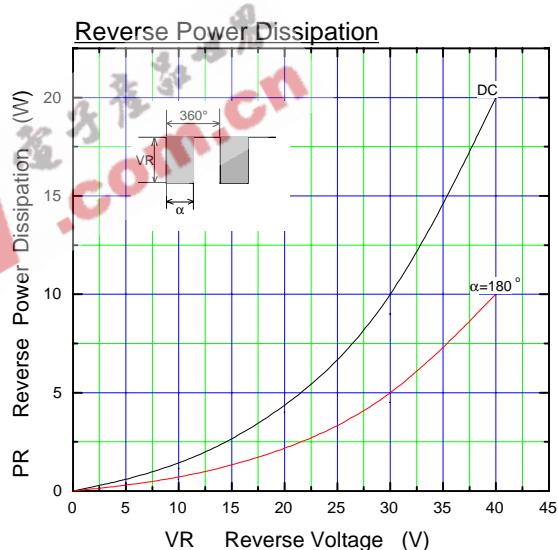
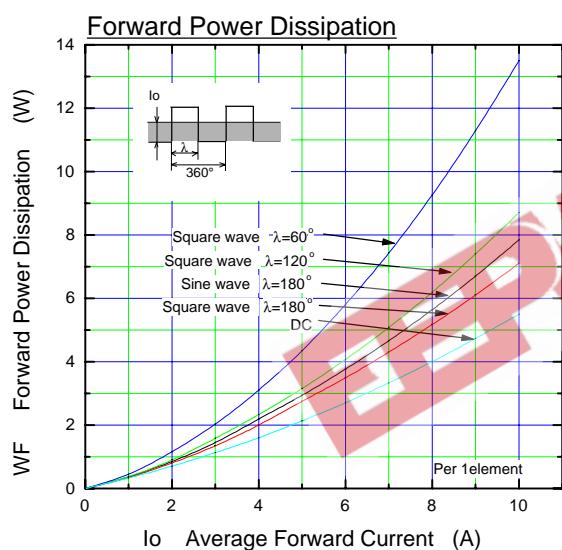
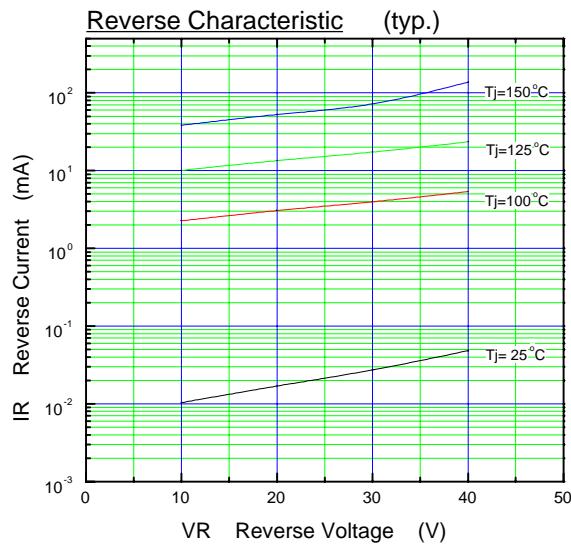
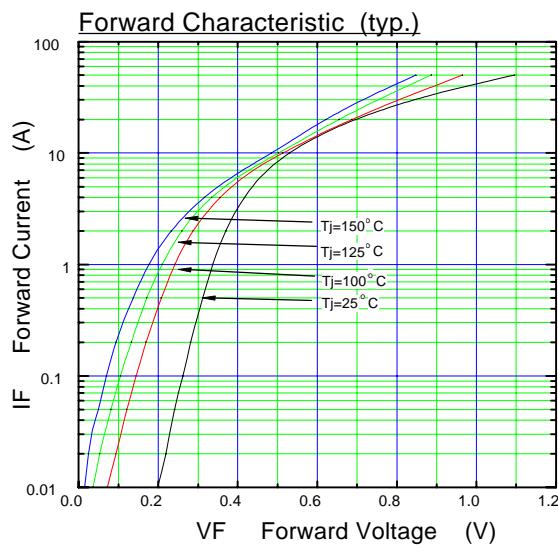
### ■ Outline Drawings



### ■ Connection Diagram



## ■ Characteristics



$\lambda$ : Conduction angle of forward current for each rectifier element  
 $I_o$ : Output current of center-tap full wave connection

