

YG805C04R

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

* Out put current of centertap full wave connection.

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

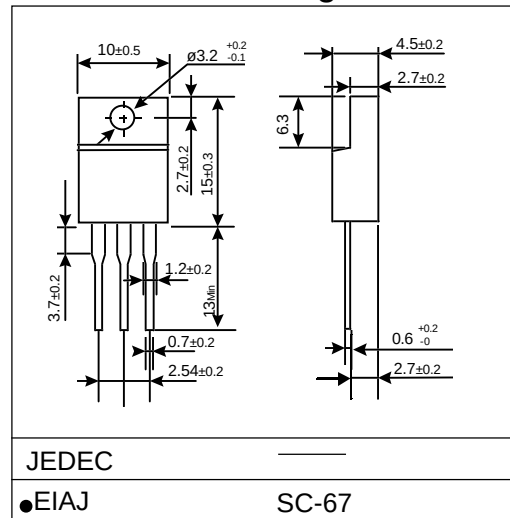
Item	Symbol	Conditions	Max.	Unit
Forward voltage drop **	V_F	$I_F=10A$	0.6	V
Reverse current **	I_R	$V_R=V_{RRM}$	15	mA
Thermal resistance	$R_{th(j-c)}$	Junction to case	2.5	$^{\circ}C/W$

** Rating per element

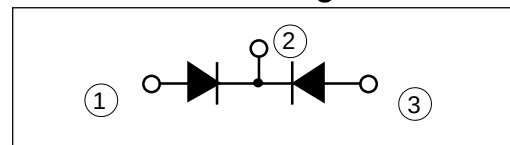
- Mechanical Characteristics

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

Outline Drawings

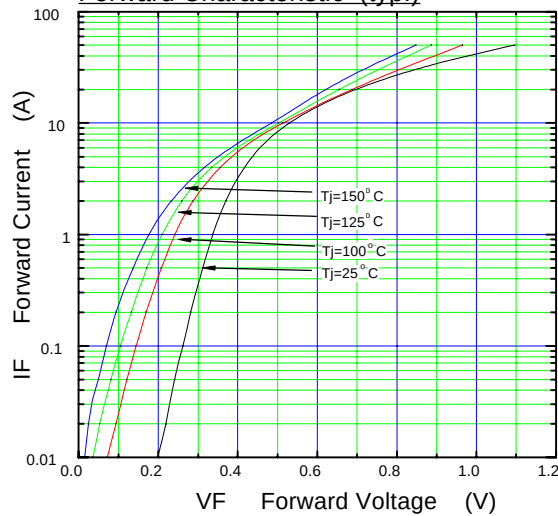


Connection Diagram

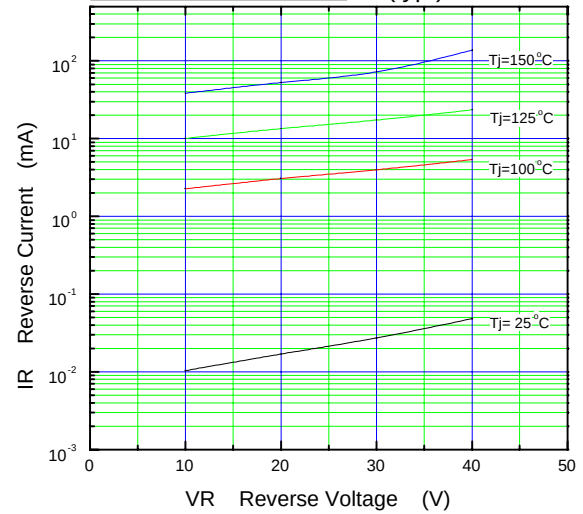


Characteristics

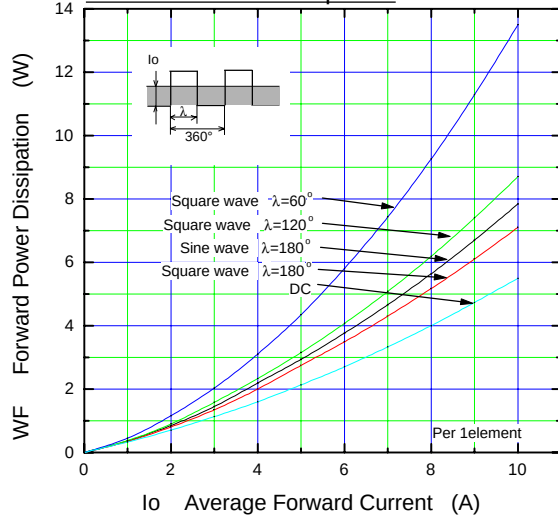
Forward Characteristic (typ.)



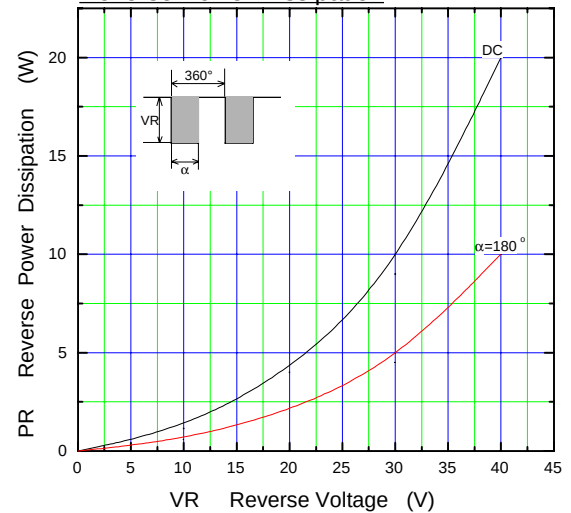
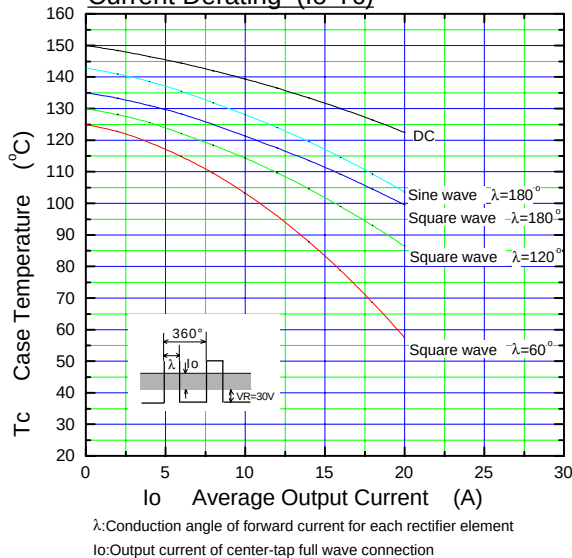
Reverse Characteristic (typ.)



Forward Power Dissipation



Reverse Power Dissipation

Current Derating (I_o - T_c)

Junction Capacitance Characteristic

