

YG831C04R

(40V / 6A 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	40	V
Isolating voltage	V_{iso}	Terminals to Case, AC, 1min.	1500	V
Average output current	I_o	duty=1/2, $T_c=122^\circ C$ Square wave	6*	A
Suege current	I_{FSM}	Sine wave 10ms	80	A
Operating junction temperature	T_j		+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)

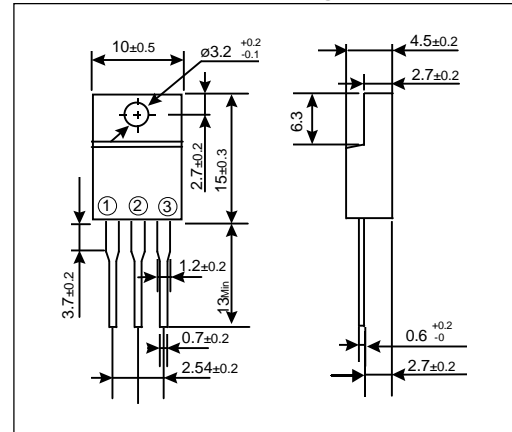
Item	Symbol	Conditions	Max.	Unit
Forward voltage drop **	V_F	$I_F=2.0A$	0.53	V
Reverse current **	I_R	$V_R=V_{RRM}$	2.0	mA
Thermal resistance	$R_{th(j-c)}$	Junction to case	5.0	$^\circ C/W$

** Rating per element

- Mechanical Characteristics

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

Outline Drawings

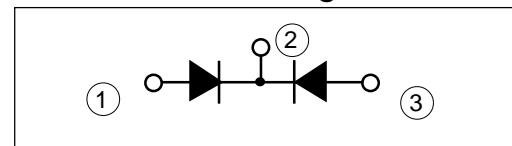


JEDEC

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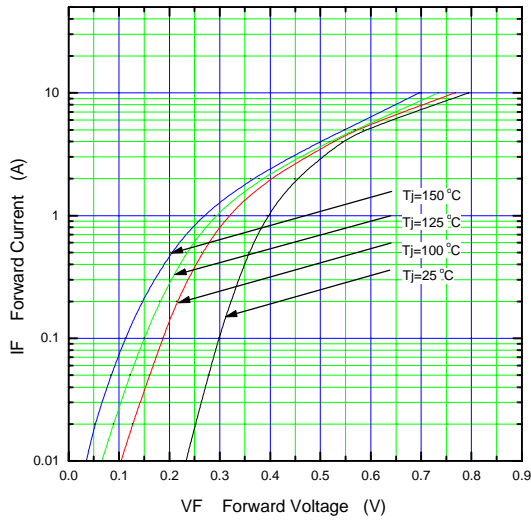
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Connection Diagram

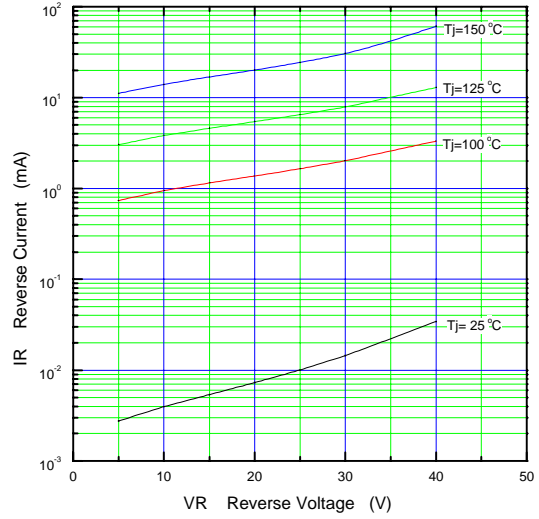


Characteristics

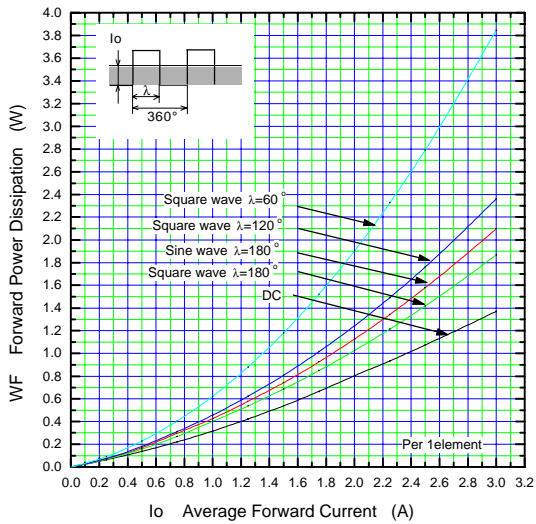
Forward Characteristic (typ.)



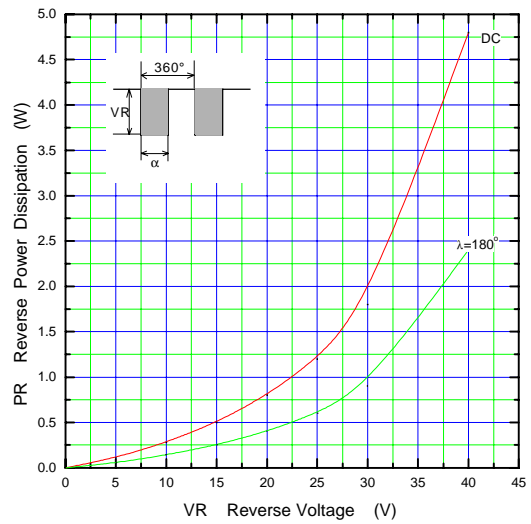
Reverse Characteristic (typ.)



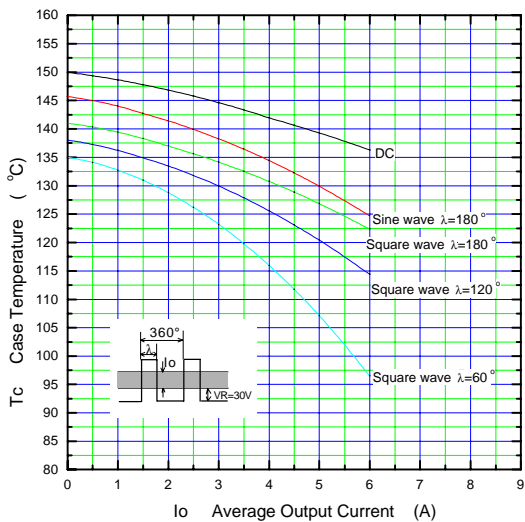
Forward Power Dissipation



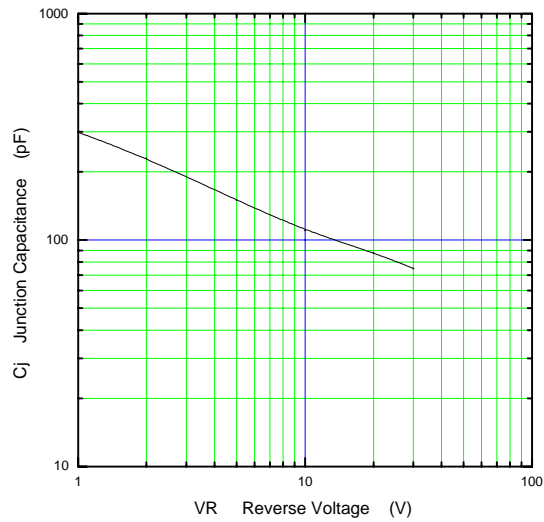
Reverse Power Dissipation



Current Derating (I_o - T_c)

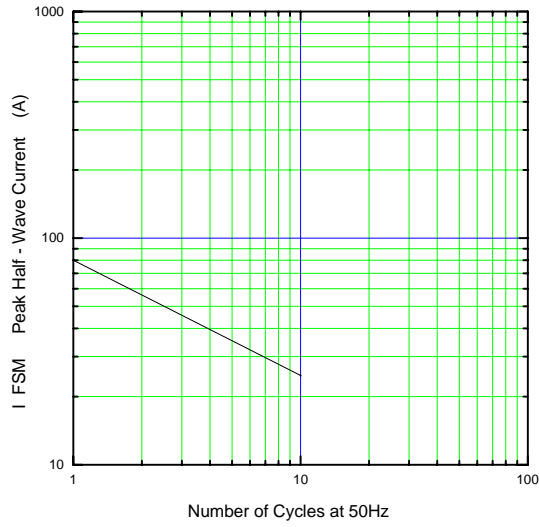


Junction Capacitance Characteristic (typ.)



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

Surge Capability



Transient Thermal Impedance

