

**6.0A FAST RECOVERY RECTIFIER BRIDGE**  
**RECTIFIER Reverse Voltage – 600 to 1000 V**  
**Forward Current – 6.0A**

**FEATURES**

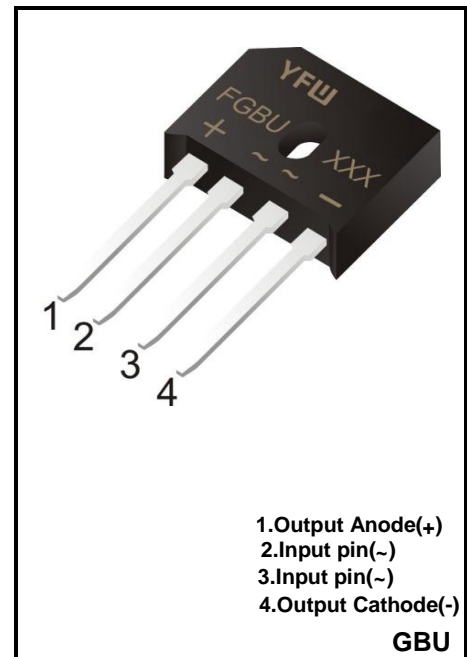
- ◆Ultrasoft recovery
- ◆LOW  $I_{RRM}$ , LOW  $V_F$ , LOW  $V_{RRM}$
- ◆Glass Passivated Chip Junction
- ◆Special frame design for heat dissipation
- ◆Lead free in comply with EU RoHS 2011/65/EU directives

**BENEFITS**

- ◆Reduced EMI
- ◆Reduced Power loss and switching transistor
- ◆Reduced snubbing

**MECHANICAL DATA**

- ◆Case: GBU
- ◆Terminals: Solderable per MIL-STD-750, Method 2026
- ◆Approx. Weight: 3.9g /0.138oz



**Maximum Ratings and Electrical characteristics**

Ratings at 25 °C ambient temperature unless otherwise specified.

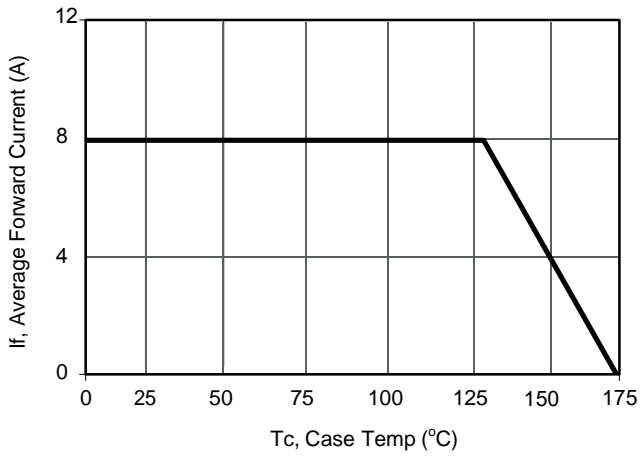
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	FGBU606	FGBU608	FGBU610	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	600	800	1000	V
Average Rectified Output Current	$I_o$	6.0			A
Reverse Recovery Time. $I_F=0.5A,I_R=1A,IRR=0.25A$	$T_{rr}$	500			nS
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load(JEDEC method)	$I_{FSM}$	175			A
$I^2t$ Rating for Fusing( $1ms \leq t \leq 10ms$ )	$I^2t$	127			A <sup>2</sup> S
Maximum Forward Voltage at 4.0 A	$V_F$	1.25			V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	5 100			uA
Typical Junction Capacitance (Note1)	$C_j$	50			pF
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +175			°C

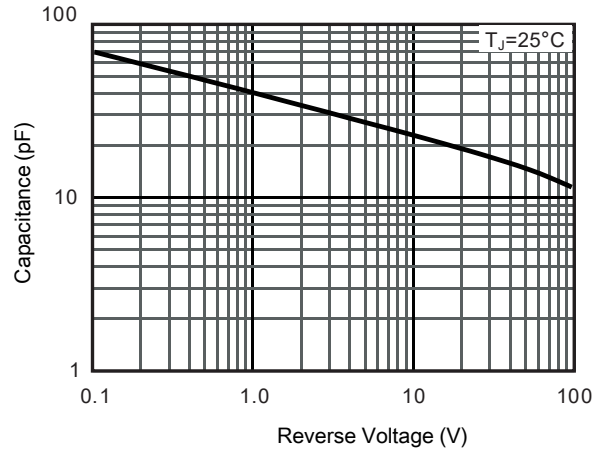
**Note:** 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

2. Mounted on glass epoxy PC board with 4×1.5"×1.5" ( 3.81×3.81 cm ) copper pad.

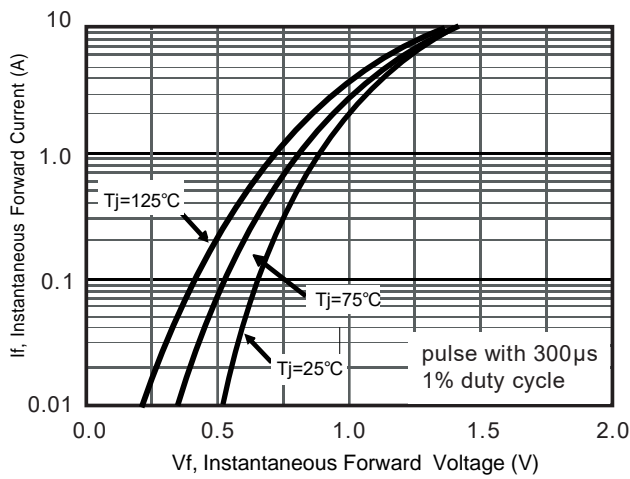
**RATINGS AND CHARACTERISTICS CURVES** (TA = 25 °C unless otherwise noted)



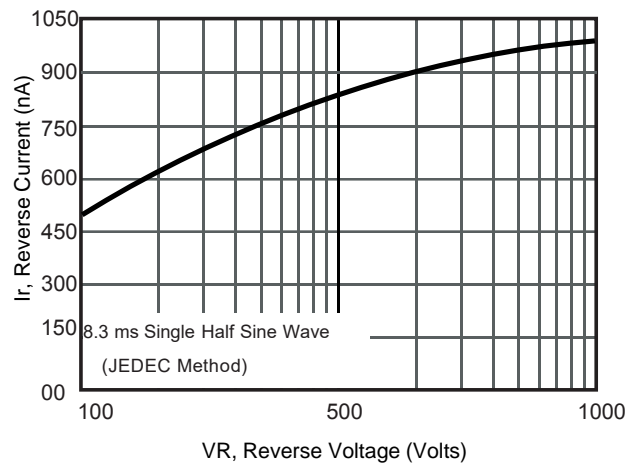
Current Derating, Case



Typical Junction Capacitance

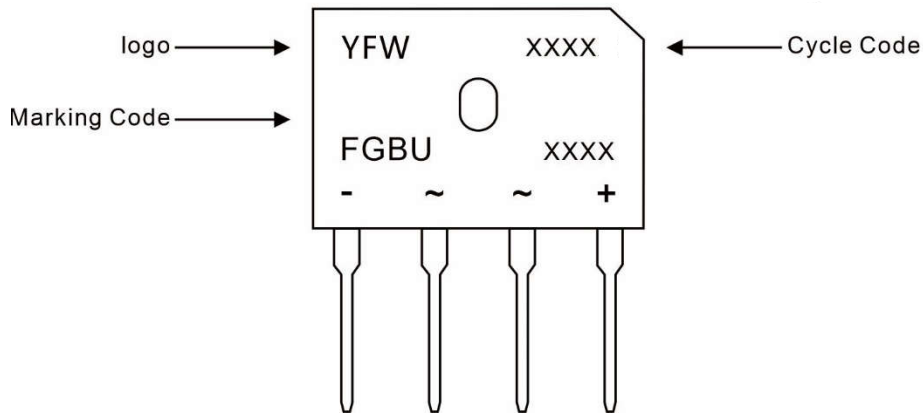


Typical Forward Voltage



Typical Reverse Current

**Marking Diagram**



**Ordering information**

Package	Packing Description	Packing Quantity
GBU	bulk	500PCS/Box 5000PCS/Carton

**Package Dimensions**

**GBU**

Dim	Millimeter(mm)		Dimensions inInch	
	Min.	Max.	Min.	Max.
A	21.70	22.30	0.86	0.88
B	18.20	18.80	0.72	0.74
C	3.70	3.90	0.146	0.154
D	1.60	2.00	0.06	0.08
E	1.80	2.20	0.07	0.09
F	2.00	2.40	0.08	0.09
G	0.90	1.30	0.04	0.05
H	3.00	/	0.12	/
I	4.88	5.28	0.19	0.21
J	3.20	3.60	0.13	0.14
K	1.70	2.10	0.07	0.08
L	17.50	18.50	0.69	0.73
M	0.40	0.60	0.02	0.02

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