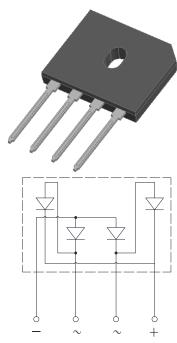




# **Fast Recovery Bridge Rectifier**



#### **Features**

- UL recognition, file #E230084
- Glass passivated chip junction
- Ideal for printed circuit boards
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

#### **Typical Applications**

General purpose use in AC/DC bridge full wave rectification for monitor, TV, printer, power supply, switching mode power supply, adapter, audio equipment, and home appliances applications.

#### **Mechanical Data**

• Package: GBU

Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant

• **Terminals**: Tin plated leads, solderable per

J-STD-002 and JESD22-B102

• Polarity: As marked on body

### ■Maximum Ratings (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	RGBU410
Device marking code				RGBU410
Maximum Repetitive Peak Reverse Voltage		VRRM	V	1000
Maximum RMS Voltage		VRMS	V	700
Maximum DC blocking Voltage		VDC	V	1000
Average rectified output current	With heatsink Tc =135°C	- Io	А	4.0
@60Hz sine wave, R-load	Without heatsink Ta =25°C			2.3
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Tj=25°C Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode		IFSM	Α	135
				270
		l²t	A <sup>2</sup> S	75.6
Storage temperature		T <sub>stg</sub>	°C	-55 ~ +150
Junction temperature		Tj	°C	-55 ~ +150
Dielectric strength  @ Terminals to case, AC 1 minute		Vdis	KV	2.5
Mounting torque @Recommend torque: 5kg·cm		Tor	kg∙cm	8

### **■Electrical Characteristics** (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	RGBU410
Maximum reverse recovery time	t <sub>rr</sub>	ns	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>Ir</sub> =0.25A	500
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=2.0A	1.3
Maximum DC reverse current at	lR	μΑ	T <sub>j</sub> =25°C	5
rated DC blocking voltage per diode			T <sub>j</sub> =125°C	100
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	35

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## **RGBU410**

### **Thermal Characteristics** $(T_a=25^{\circ}\mathbb{C} \text{ Unless otherwise specified})$

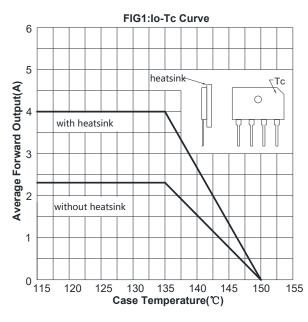
	PARAMETER		UNIT	RGBU410
Thermal	Between junction and ambient, Without heatsink	RøJ-A	°C/W	25.0
Resistance	Between junction and case, With heatsink	R <sub>0</sub> J-C	CIVV	2.0

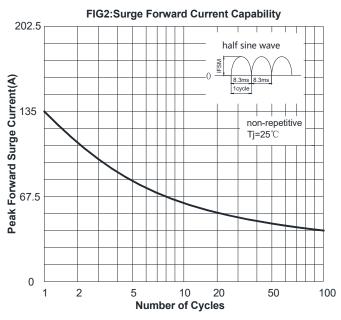
Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

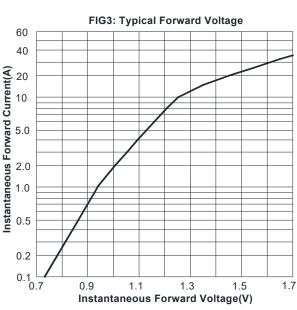
**■Ordering Information** (Example)

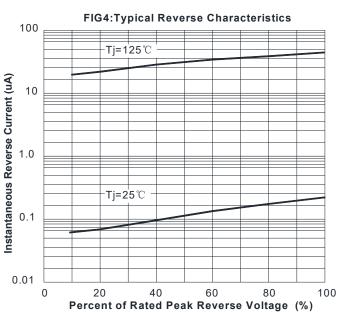
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
RGBU410	B1	Approximate 3.96	20	1000	2000	TUBE

### **■ Characteristics** (Typical)





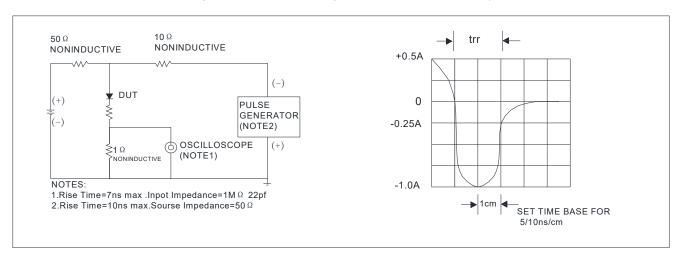




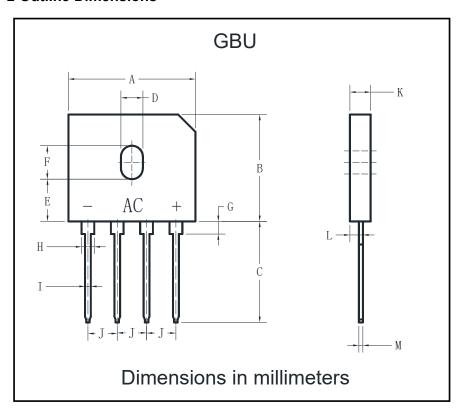


# **RGBU410**

FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



#### **■** Outline Dimensions



GBU					
Dim	Min	Max			
Α	21.80	22.30			
В	18.30	18.80			
С	17.50	18.00			
D	3.30	3.90			
Е	7.10	7.50			
F	5.50	5.90			
G	1.91	2.54			
Н	2.06	2.54			
I	1.02	1.27			
J	4.83	5.33			
K	3.30	3.56			
L	2.40	2.66			
М	0.46	0.56			



### **RGBU410**

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