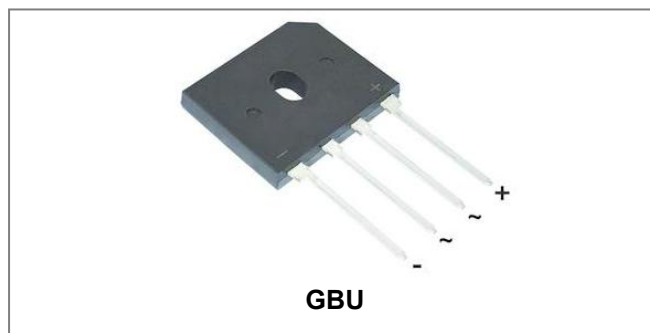


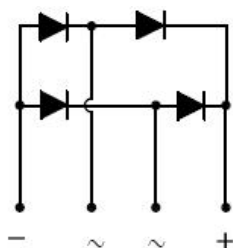
**EGBU1001 THRU EGBU1006  
SINGLE PHASE 10.0AMP SUPER FAST GLASS PASSIVATED BRIDGE RECTIFIER**



**Features**

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

**Circuit Diagram**



**Mechanical Data**

- Case: GBU, Molded plastic
- Terminals: Plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS / Lead Free Version

**Maximum Ratings:**

Type Number	Symbol	EGBU 1001	EGBU 1002	EGBU 1004	EGBU 1006	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_{DC}$	100	200	400	600	V
RMS Reverse Voltage	$V_{RMS}$	70	140	280	420	V
Average forward rectified output current (Note1) @ $T_C = 90^\circ C$	$I_o$	10.0				A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	170				A
$I^2t$ Rating for fusing (t < 8.3ms)	$I^2t$	120				A <sup>2</sup> s

**Electrical Characteristics:**

Type Number	Symbol	EGBU 1001	EGBU 1002	EGBU 1004	EGBU 1006	Unit
Forward Voltage (per element) @ $I_F = 5A$	$V_F$	0.95		1.25	1.7	V
Peak Reverse Current @ $T_A = 25^\circ C$ At Rated DC Blocking Voltage @ $T_A = 125^\circ C$	$I_{RM}$	5.0 500				$\mu A$
Maximum reverse recovery time (Note 2)	$T_{RR}$	35				ns
Typical Junction Capacitance(per leg) (Note 3)	$C_J$	70				pF

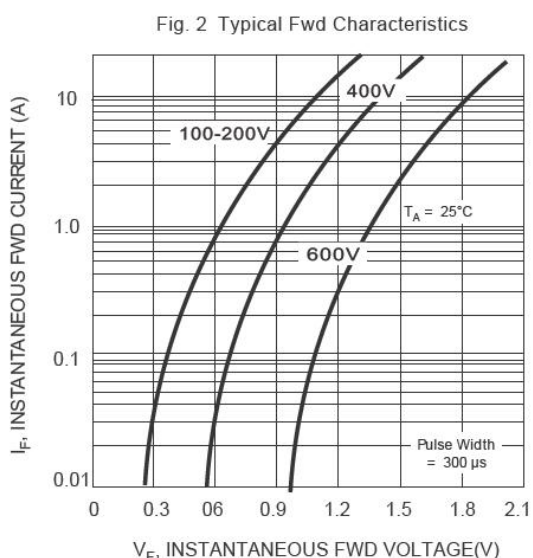
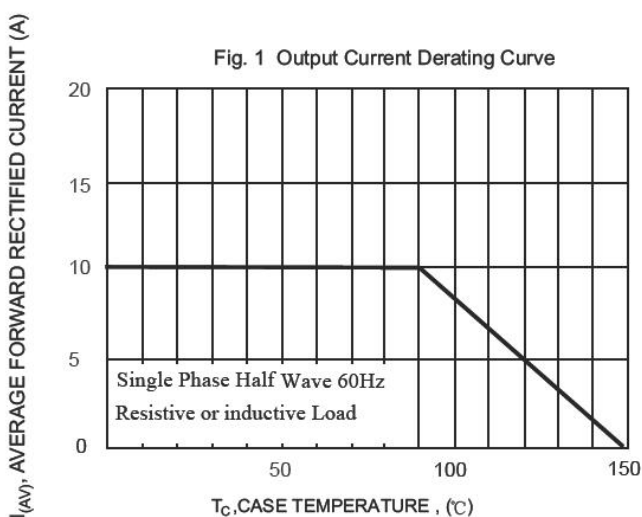
\* Pulse width < 300  $\mu s$ , duty cycle < 2%

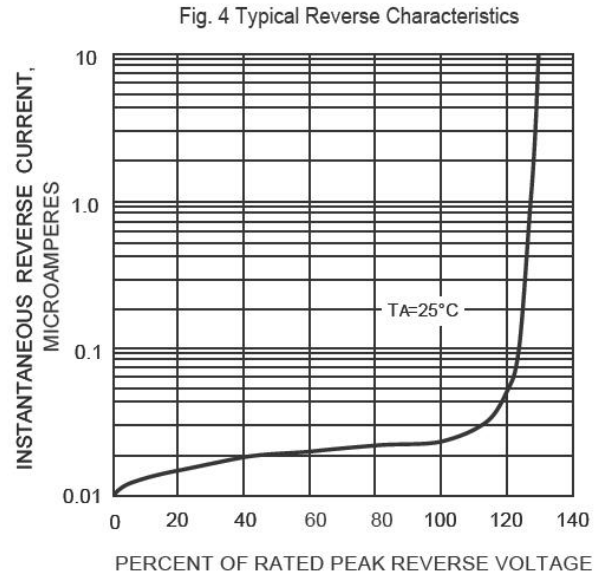
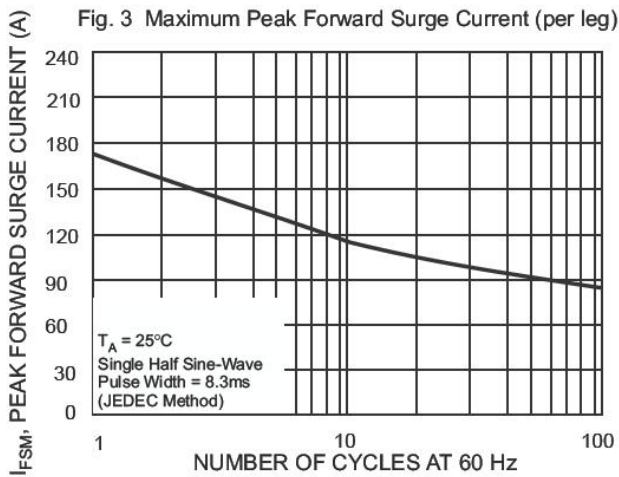
**Thermal-Mechanical Specifications:**

Type Number (Note1)	Symbol	EGBU 1001	EGBU 1002	EGBU 1004	EGBU 1006	Unit
Typical Thermal Resistance (per leg) (Note 4)	$R_{\theta JA}$ $R_{\theta JL}$	30.9 7.3				$^\circ C/W$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150				$^\circ C$
Case Style		GBU				

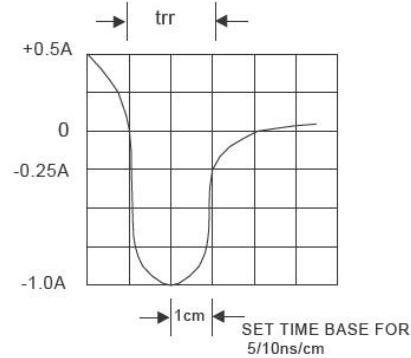
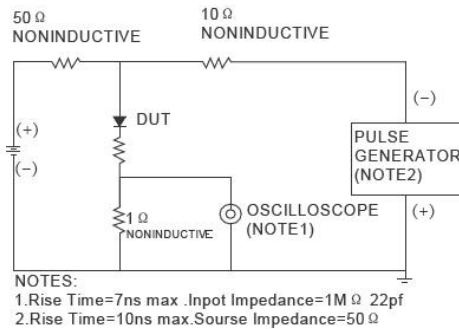
- Note: 1. Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> solder pad.  
 2. Reverse Recovery Test Conditions:  $I_F=0.5A, I_R=1A, I_{rr}=0.25A$ .  
 3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.  
 4. Device mounted on 50mm x 50mm x 1.6mm Cu Plate Heatsink.

**Ratings and Characteristics Curves**





**FIG.5 REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**

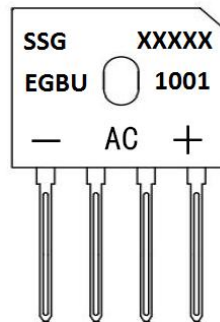


**Ordering Information**

Device	Package	Shipping
EGBU1001 THRU EGBU1006	GBU(Pb-Free)	20pcs / tube

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

**Marking Diagram**

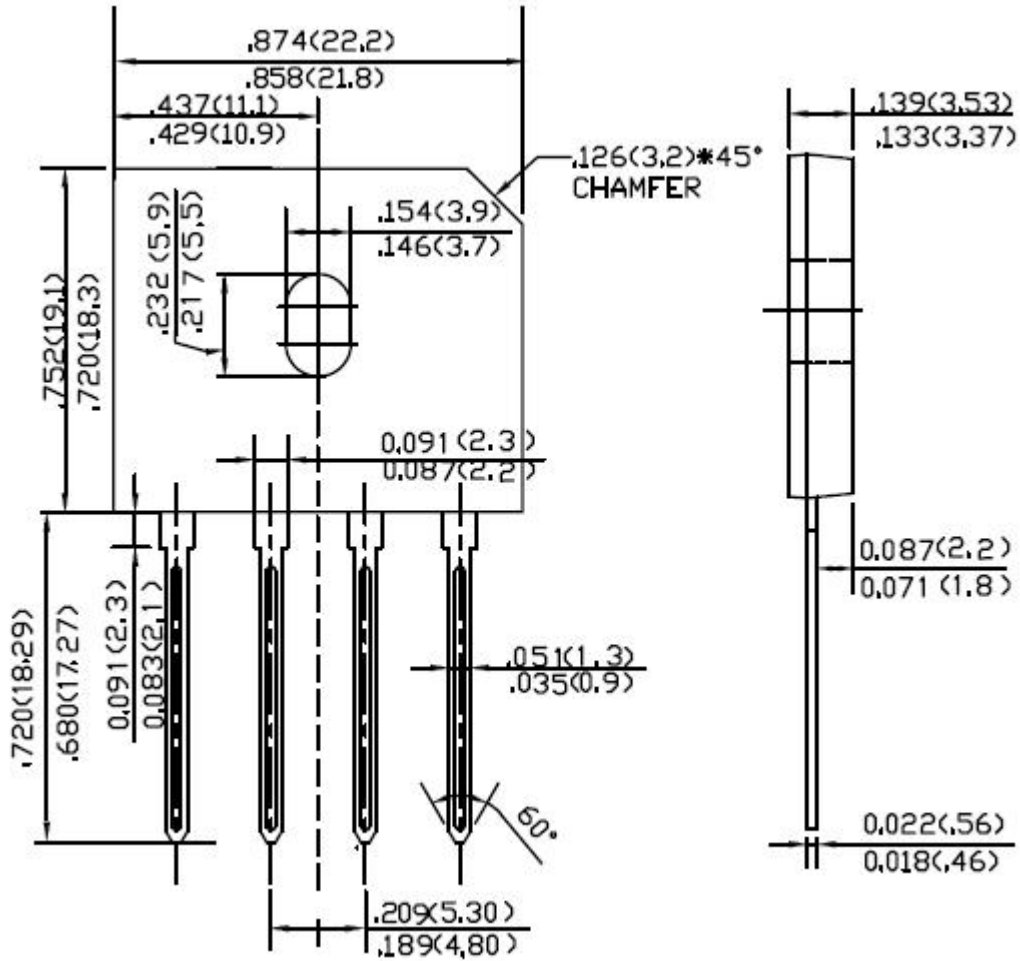


Where XXXXX is YYWWL

SSG = SSG  
 YY = Year  
 WW = Week  
 L = Lot Number  
 EGBU1001 = Type Number

**Cautions:** Molding resin  
 Epoxy resin UL:94V-0

**Mechanical Dimensions GBU (Inches/Millimeters)**



**Technical Data  
Data Sheet N1927, Rev. -**



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