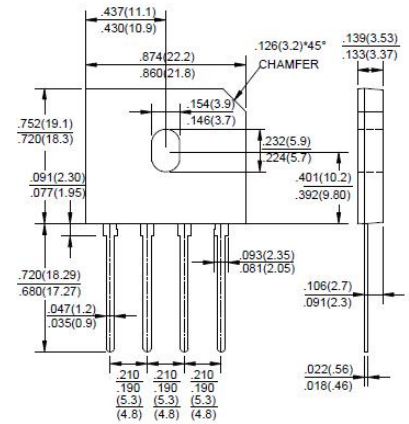
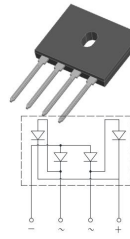


10A Glass Passivated Single-Phase Low VF Bridge Rectifiers

Features

- 130mil Oxide planar chip junction Bridge Rectifiers
- Low forward drop enhance the efficiency
- High case dielectric strength
- Low Reverse Leakage Current
- Ideal for Printed Circuit Board Applications
- High surge current capability Surge overload rating -250 amperes peak
- Plastic material has U/L flammability classification 94V-0
- Mounting position: Any



Dimensions in inches and (millimeters)

Package: GBU

Mechanical Data

- Weight: 0.138 ounces , 3.90grams
- Maximum Ratings and specified Electrical Characteristics
- Single phase, half wave ,60Hz, resistive or inductive load.
- For capacitive load, derate current by 20%

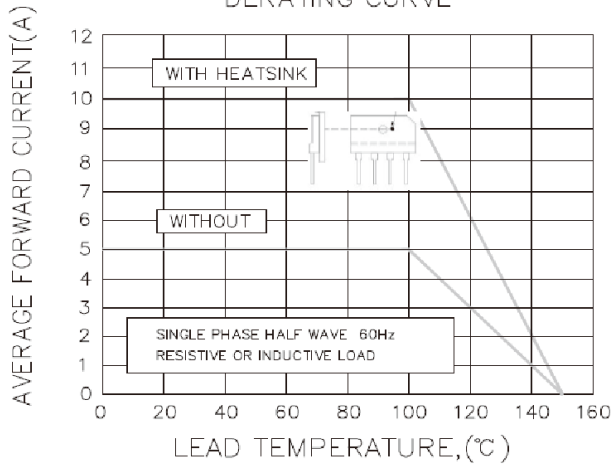
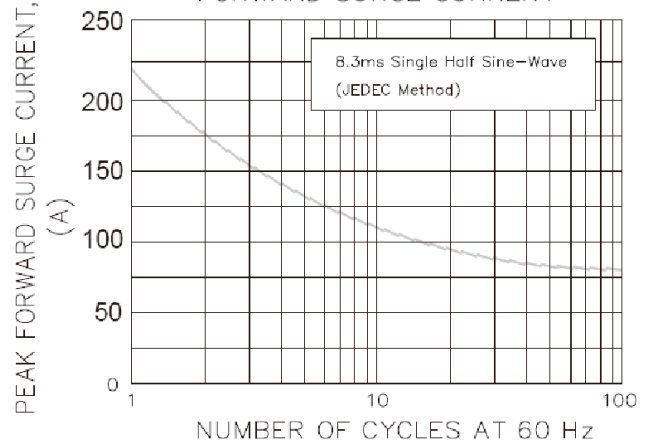
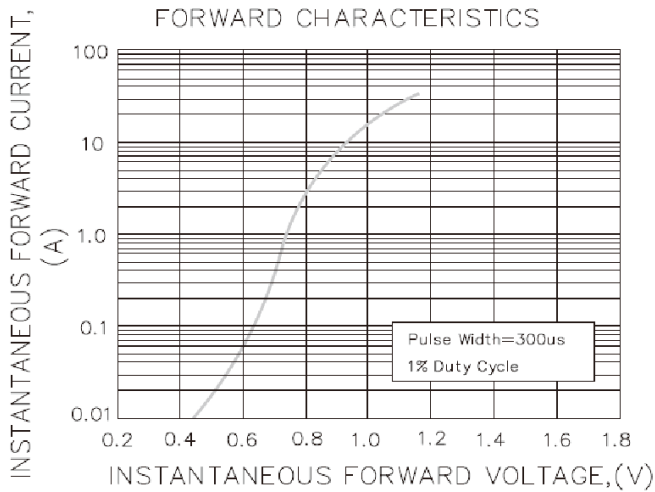
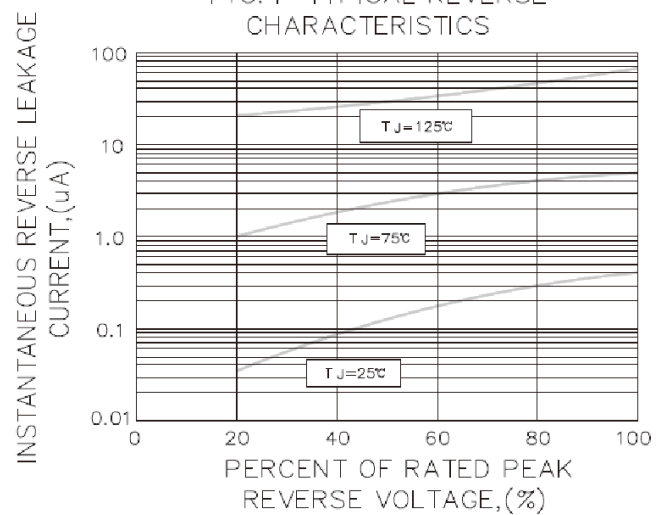
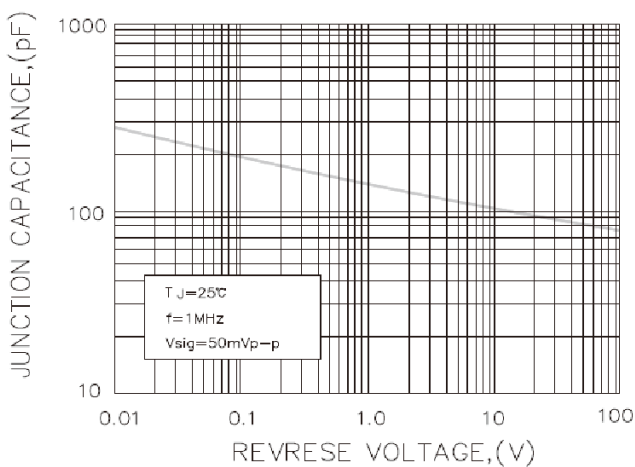
Maximum Ratings and Electrical Characteristics (Rating at 25°C ambient temperature unless otherwise)

TYPE NUMBER	SYMBOLS	GBU10LK	UNIT
Maximum Reverse Peak Repetitive Voltage	V_{RRM}	800	Volts
Maximum RMS Voltage	V_{RMS}	560	Volts
Maximum DC Blocking Voltage	V_{DC}	800	Volts
Maximum Average Forward Rectified Output Current, 0.06"(1.5mm) lead length at $T_c=100^\circ\text{C}$	$I_{(AV)}$	10	Amps
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC Method)	I_{FSM}	220	Amps
Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	210	A^2s
Maximum Instantaneous Forward Voltage drop Per Bridge element 5A	V_F	0.9	Volts
Maximum Reverse Current at rated DC blocking voltage per element	TA=25°C	10	μAmps
	TA=150°C	500	
Typical Junction Capacitance Per Element ^(Note1)	C_j	200	pF
Typical Thermal Resistance ^(NOTE 2)	$R_{\theta JC}$	3.0	°C/W
Mounting Torque (Recommended torque:0.5 N.m)	T_{OR}	0.8	N.m
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +175	°C

Notes:

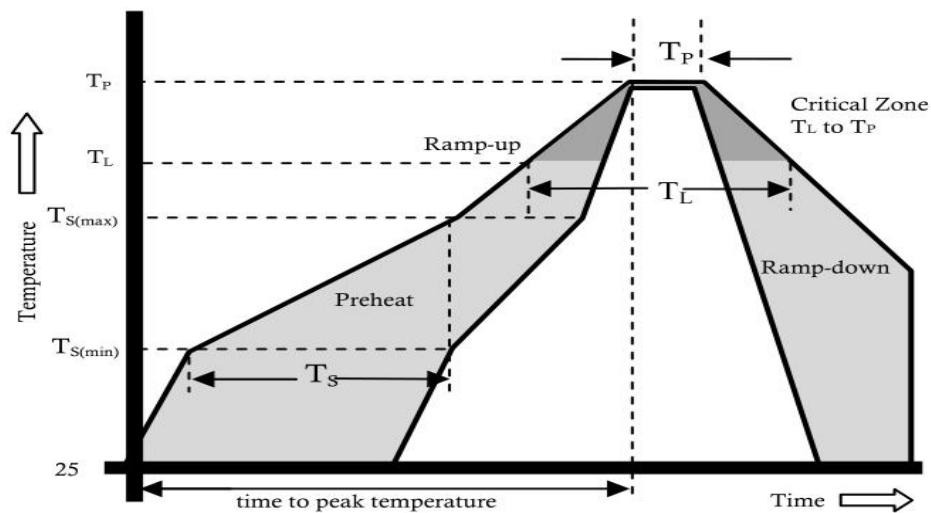
1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
2. Junction to case with heatsink.
3. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw.

Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

FIG.1—FORWARD CURRENT DERATING CURVE

FIG.2—MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

FIG.3—TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

FIG.4—TYPICAL REVERSE CHARACTERISTICS

FIG.5—TYPICAL JUNCTION CAPACITANCE


Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBU	B1	Approximate 3.96	250	250	2000	TUBE

Reflow Profile


Reflow Condition		Pb-Free Assembly
Pre Heat	Temperature Min.	+150°C
	Temperature Max.	+200°C
	Time(Min to Max)	60-180 secs.
Average ramp up rate(Liquidus Temp(T_L) to peak)		3°C/sec. Max.
$T_{S(max)}$ to T_L - Ramp-up Rate		3°C/sec. Max.
Reflow	Temperature (T_L)(Liquidus)	+217°C
	Temperature (T_L)	60-150 secs.
Peak Temp (T_P)		+(260+0/-5)°C
Time within 5°C of actual Peak Temp (T_P)		25 secs.
Ramp-down Rate		6°C/sec. Max.
Time 25°C to peak Temp (T_P)		8 min. Max.
Do not exceed		+260°C

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