



Product Announcement

GBJ25L08, GBU15L08,
KBJ15L08, TT8L08

800V Bridge Rectifiers, with Lowest Forward Voltage in Class, Enhance System Efficiency and Reliability

The GBJ25L08, GBU15L08, KBJ15L08 and TT8L08 single-phase bridge rectifiers feature a low forward voltage (V_F), minimizing power losses and improving system efficiency.

Designed for offline AC voltage rectification, they are ideal for industrial, consumer electronics, and communications applications.

With a maximum V_F of 900mV, these rectifiers reduce heat generation and power dissipation, leading to lower cooling requirements and operating costs. Their advanced wafer and die design enables higher efficiency that is typically found in lower-rated devices, improving overall system performance and longevity.

The 800V maximum repetitive peak reverse voltage offers robust protection against surges, enhancing system reliability, especially in environments prone to voltage spikes from lightning or power fluctuations.

Compared to lower-rated 600V devices, these 800V rectifiers provide higher voltage capability, offering increased system resilience without the typical rise in V_F seen in higher-voltage components.

Offering a choice of current ratings—including the 25A GBJ25L08, 15A GBU15L08, and KBJ15L08 in through-hole packages, as well as the 8A TT8L08 in the compact TTL surface-mount package—these rectifiers deliver a flexible and high-efficiency solution for a range of power systems.

The Diodes logo is a registered trademark of Diodes Incorporated in the United States and other countries.

All other trademarks are the property of their respective owners.

2024 Copyright Diodes Incorporated. All Rights Reserved.



The DIODES Advantage

These devices enhance power systems by improving efficiency, stability, and durability across a range of applications.

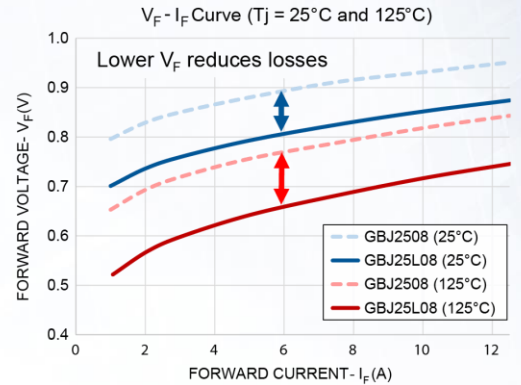
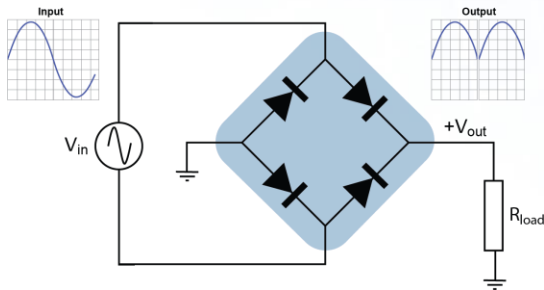
- **Low Forward Voltage (V_F) of 900mV**
 Reduces power losses and heat, lowering energy consumption and cooling needs to reduce running costs
- **High Voltage Resilience (800V)**
 Enhanced protection improving system stability, reliability, and longevity to reduce-down time and maintenance costs
- **Lower System Operating Temperature**
 - Reduced cooling budget
 - Quieter system operation

Typical Applications

- GBJ25L08: 800W - 1200W
- Data center servers
- GBU15L08 / KBJ15L08: 150W - 250W
- Consumer appliances
- Industrial PCs
- TT8L08: 180W
- PD chargers
- PoE PSU

Typical Application

Single Phase Rectification



V_F measured per diode

Product Portfolio

Part Number	Maximum Repetitive Peak Reverse Voltage	Average Rectified Output Current	Forward Voltage (Max.)	Leakage Current	Typical Thermal Resistance with/without Heatsink R θ JC	Package
	V	A	mV	μA	$^\circ\text{C}/\text{W}$	
GBJ25L08	800	25	900	10	0.8 / 3	GBJ
GBU15L08	800	15	900	10	1 / 6	GBU
KBJ15L08	800	15	900	10	1.5 / 6	KBJ
TT8L08	800	8	900	5	4.5 / 12.5	TTL

See respective datasheets for test conditions

Ordering Information

Orderable Part Number	Package	Packing	
		Quantity	Carrier
GBJ25L08	GBJ	15	Tube
GBU15L08	GBU	20	Tube
KBJ15L08	KBJ	20	Tube
TT8L08-13	TTL	1,500	Reel