

Vishay General Semiconductor

New PowerBridgeTM Series - Enhanced Power Bridge Rectifiers 25 A, 20 A, 15 A, 12 A, and 10 A





New space saving enhanced high current density bridge (BU) package for switch mode power supplies, home appliances and audio/video equipments, efficient performance comparable to larger size bridge products in market. Low thermal resistance $R_{\theta JC(L/A)}$, reduces heat-sink size with bridge rectifiers in system (less heat generated by power supply compared to larger size market bridge products of similar power performances).

Compatible package, lead pitch and pin layout to conventional GBU package saves design time when changing bridge rectifiers with increased system power demand (not necessary to change P.C.B. layout and heat sink when system power increased). 260 °C, 40 s of solder dipping process enables high reliability in manual soldering.

APPLICATIONS INCLUDE

- Primary rectification circuit of switch mode power supplies and adaptors for desktop PCs, servers, notebook PCs, plasma display panel (PDP) TVs, LCD TVs, and monitors.
- Primary rectification circuit of inverter type home appliance as in refrigerator, washing machine, air conditioner and induction heater systems.
- · Primary rectification circuit of switch mode power supplies in telecommunication systems

PART NUMBER	DESCRIPTION	PACKAGE	V _F AT I _F PER CHIP, T _J
BU25	600 thru 1000 V 25 A single phase bridge rectifier	BU	0.87 V typical at 12.5 A, 125 °C
BU20	600 thru 1000 V 20 A single phase bridge rectifier	BU	0.85 V typical at 10 A, 125 °C
BU15	600 thru 1000 V 15 A single phase bridge rectifier	BU	0.87 V typical at 7.5 A, 125 °C
BU12	600 thru 1000 V 12 A single phase bridge rectifier	BU	0.88 V typical at 6 A, 125 °C
BU10	600 thru 1000 V 10 A single phase bridge rectifier	BU	0.88 V typical at 5 A, 125 °C