

Single Phase Rectifier Bridge

V_{RRM} 200 to 1200V

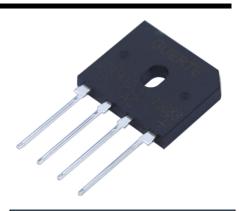
I_D 15 Amp

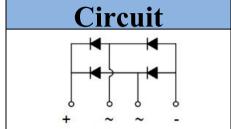
Features

- Glass passivated chip
- Ideal for printed circuit boards
- High surge current capability
- High temperature soldering guaranteed:265 °C/10 seconds

Applications

- Single phase rectifiers for power supplies
- Rectifiers for DC motor field supplies
- Industrial automation equipment
- Input rectifiers for inverter





Module Type

Туре	V_{RRM}	V_{RSM}
GBU1502	200V	300V
GBU1504	400V	500V
GBU1506	600V	700V
GBU1508	800V	900V
GBU1510	1000V	1100V
GBU1512	1200V	1300V

Maximum Ratings

Symbol	Item	Conditions	Values	Unit
I _D	Output Current	Single Phase,Sin Full Wave T _c = 105°C	15	А
I _{FSM}	Surge Forward Current	$T_j = 25$ °C, $t = 50$ Hz(10ms), $V_R = 0$ V	250	Α
l ² t	Circuit Fusing Consideration	t = 10ms T _j =25°C	312	A ² s
V _{ISO}	Isolation Breakdown Voltage	AC 50Hz/60Hz; R.M.S; 1min	2500	V
T _i	Operating Junction Temperature		-40 to +150	°C
T _{stg}	Storage Temperature		-40 to +150	°C
Ms	Mounting Torque	(Recommended torque:0.65 N·m)	0.8	N·m
Weight	Module (Approximately)		4	g

Thermal Characteristics

Symbol	Item	Conditions	Values	Unit
R _{th(j-c)}	Thermal Impedance, Max	Junction to Case(Per Total)	1.5	°C/W
		Junction to Case(Per Diode)	6.0	°C/W

Electrical Characteristics

Symbol	Item	Conditions	Values			Unit
Symbol			Min.	Тур.	Max.	Unit
V _{FM}	Forward Voltage Drop, Max	$T_j = 25^{\circ}C$ $I_F = 7.5A$	_	_	1.0	V
I _{RRM} Repetitive Peak Reve	Panatitiva Book Boyaraa Current May	$T_j = 25$ °C $V_R = V_{RRM}$		_	5	uA
	Repetitive Feak Reverse Current, Max	$T_j = 150$ °C $V_R = V_{RRM}$		_	0.5	mA
V _{T0}	Threshold Voltage, for power loss calculation only	T _j = 125°C	0.75		V	
r _T	Slope Resistance, for power loss calculation only	T _j = 125°C	11.0		mΩ	



Performance Curves

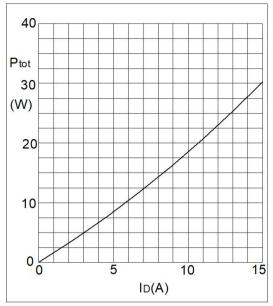


Fig1. Power Dissipation

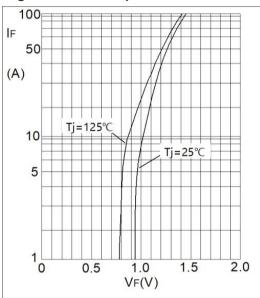


Fig3. Forward Characteristics

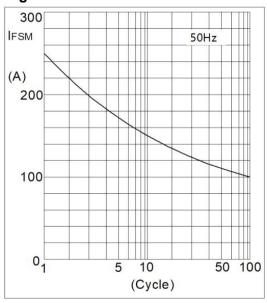


Fig5. Max Non-Repetitive Forward Surge Current

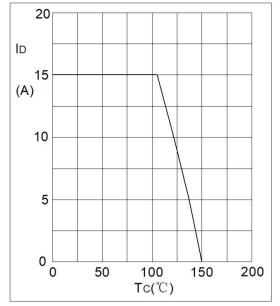


Fig2. Forward Current Derating Curve

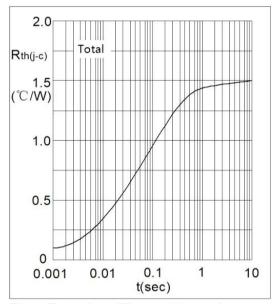
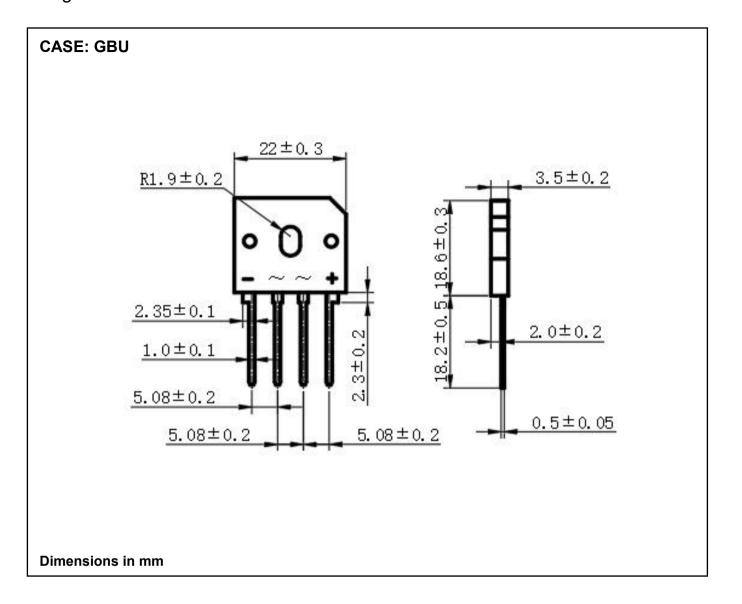


Fig4. Transient Thermal impedance



Package Outline Information



Revised: 2024-06, Revision2.1



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