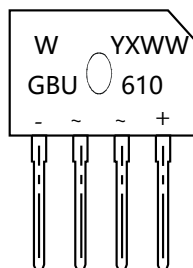


Glass Passivated Bridge Rectifiers



PINNING

PIN	DESCRIPTION
1	Input Pin (~)
2	Input Pin (~)
3	Output Anode (+)
4	Output Cathode (-)

Features

- Compliant with RoHS Provisions
- Low forward voltage, high forward current
- High forward surge current capability
- High heat-conducting performance
- Thermal welding performance: 260 °C/10sec

Applications

- Switching Power Supply
- Home Appliances, Office Devices
- Industrial Auto-equipments

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

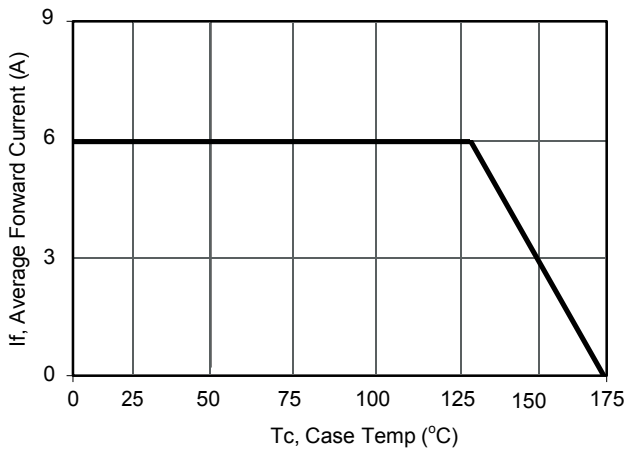
Parameter	Symbols	GBU610	Units
Maximum Repetitive Peak Reverse Voltage	VRRM	1000	V
Maximum RMS voltage	VRMS	700	V
Maximum DC Blocking Voltage	VDC	1000	V
Average Rectified Output Current	I_o	6.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	IFSM	150	A
$I^2 t$ rating for fusing (1ms < t < 8.3ms)	$I^2 t$	93.3	A ² S
Maximum Forward Voltage at 3.0 A	V _F	1.1	V
Maximum DC Reverse Current @TA=25 °C at Rated DC Blocking Voltage @TA=125 °C	I _R	5 500	μA
Typical Junction Capacitance (Note1)	C _j	50	pF
Operating and Storage Temperature Range	T _j , T _{stg}	-55 ~ +175	°C
Typical thermal resistance (Note 2)	R _{thJA} R _{thJL}	10 3.0	°C/W

Note: 1. Measured at 1MHz and applied reverse voltage of 4 VDC.

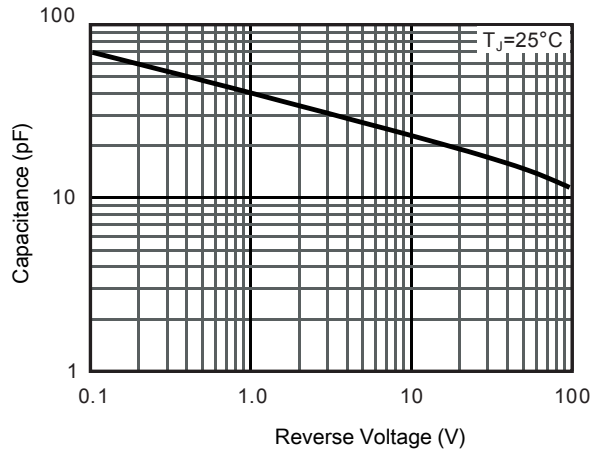
2. Thermal resistance junction to case, lead and ambient in accordance with JESD-51.

Unit mounted on glass-epoxy substrate with 1oz/ft² 20x20 mm copper pad per pin with heatsink

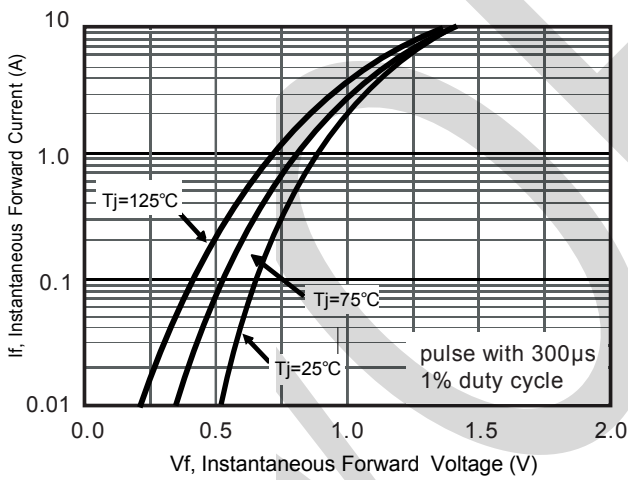
RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



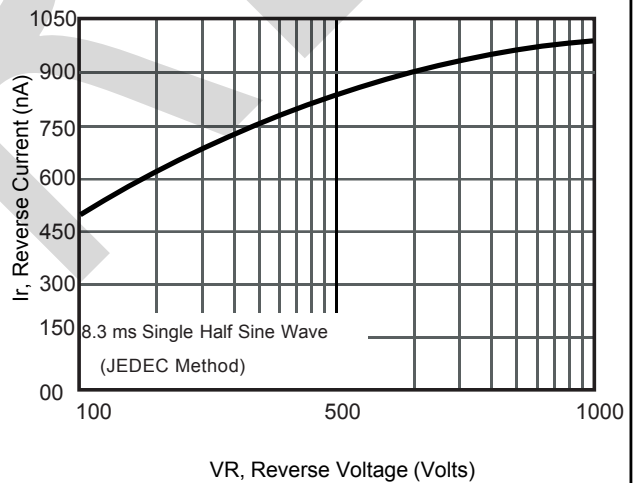
Current Derating, Case



Typical Junction Capacitance

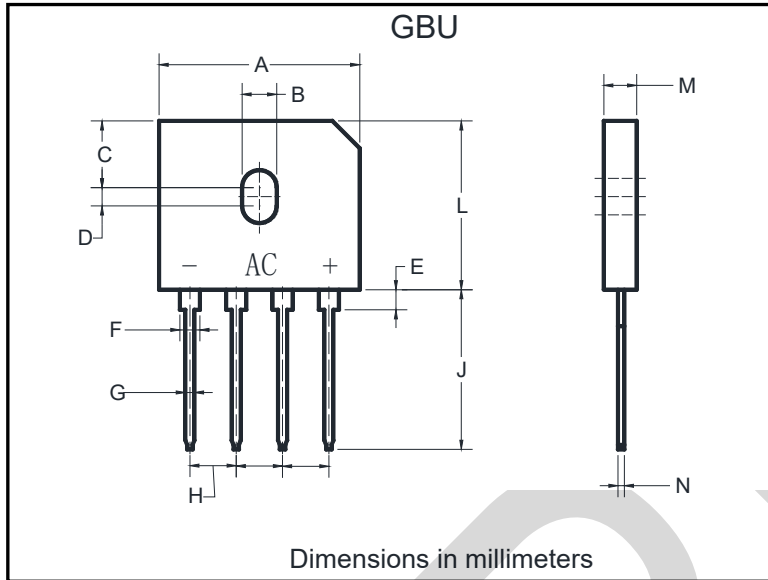


Typical Forward Voltage

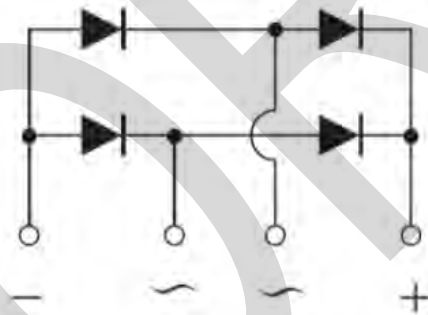


Typical Reverse Current

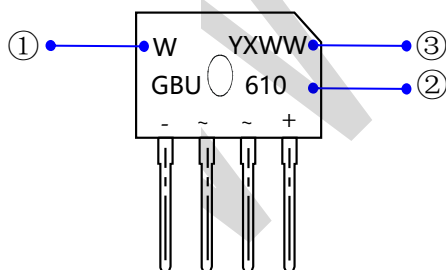
PACKAGE OUTLINE DIMENSIONS



GBU		
Dim	Min	Max
A	21.70	22.50
B	3.40	4.10
C	7.40	8.00
D	1.65	2.26
E	2.25	2.85
F	2.05	2.4
G	1.02	1.37
H	4.83	5.43
J	17.0	18.6
L	18.3	18.9
M	3.30	3.66
N	0.46	0.66



Marking Information



① W : Company's trademark

② Product model : GBU610

③ PDC information :

Y X WW

WW: Week code (01 to 53)

X: Internal identification code

Y: Year code (ex: 0=2020)