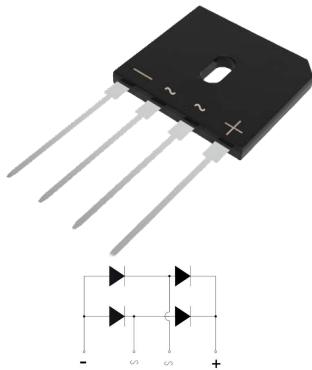


Special For DC-AC Rectifier Bridge

GBU1512E50



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

- UPS uninterruptible power supply
- Portable outdoor energy storage
- Inverter
- Electronic rectifier

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	GBU1512E50	Units
Maximum Repetitive Peak Reverse Voltage	VRRM	1200	V
Maximum RMS voltage	VRMS	840	V
Maximum DC Blocking Voltage	VDC	1200	V
Average Rectified Output Current	Io	15.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	IFSM	220	A
I ² t rating for fusing (1ms < t < 8.3ms)	I ² t	200	A ² S
Maximum Forward Voltage at 7.5 A	VF	2.35	V
Maximum DC Reverse Current @TA=25 °C at Rated DC Blocking Voltage @TA=125 °C	IR	5 500	μA
Reverse Recovery Time. IF=0.5A, IR=1A, IRR=0.25A	TRR	50	ns
Operating and Storage Temperature Range	Tj, Tstg	-55 ~ +150	°C
Typical thermal resistance	RthJA	9.0	°C/W
	RthJL	1.5	

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

Fig.1 Current Derating, Case

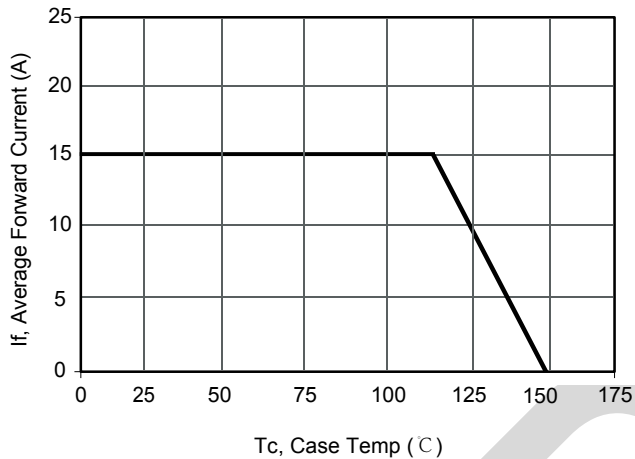


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

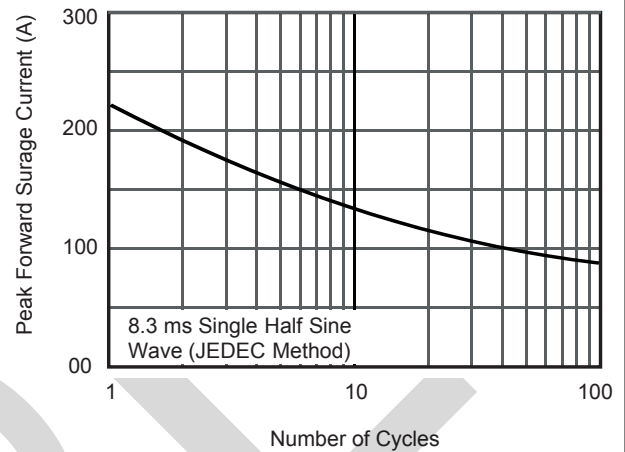


Fig.3 Typical Forward Voltage

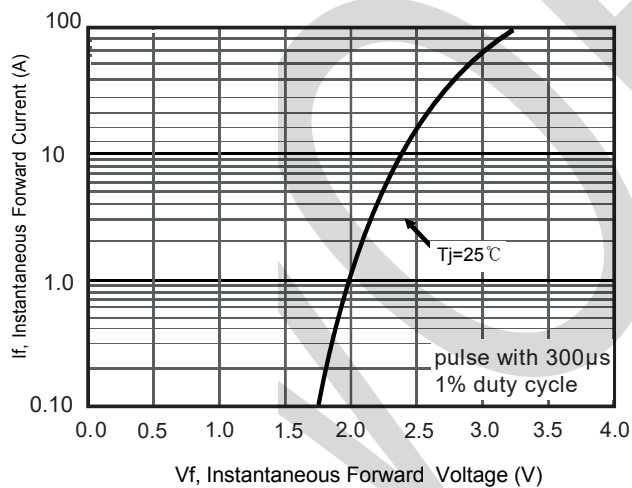
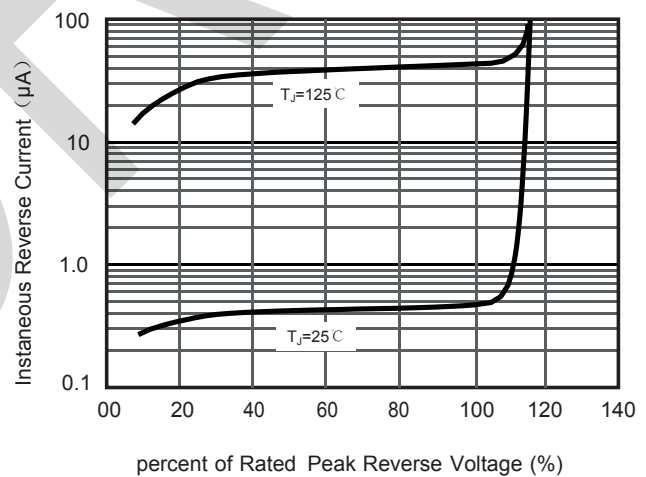
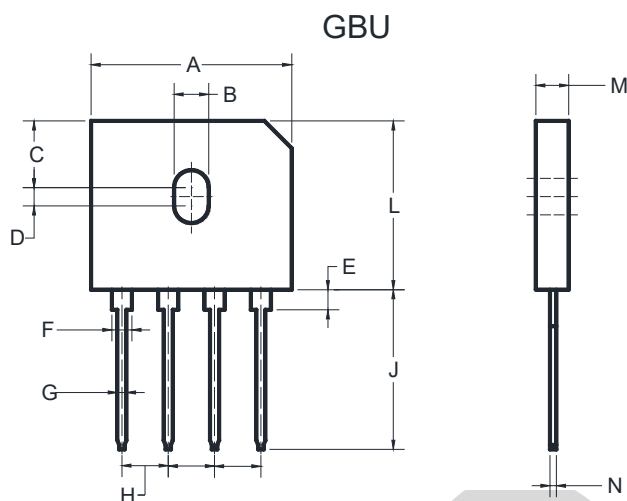


Fig.4 Typical Reverse Characteristics



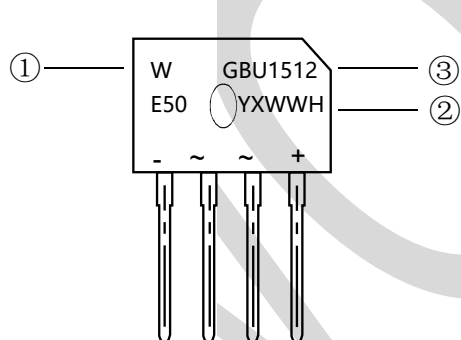
PACKAGE OUTLINE DIMENSIONS



Dimensions in millimeters

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



- ①W : Company's trademark
- ②Product model : GBU1512E50
- ③PDC information :

Y X WW H

- Y : Year code(ex:0=2020)
- X : Internal identification code
- WW : Week code(01 to 53)
- H : Halogen-free