



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

GBU15A
THRU
GBU15M

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 15 Amperes

FEATURES

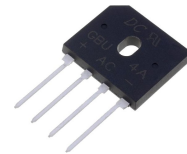
- * Ideal for printed circuit board
- * Surge overload rating: 300 Amperes peak
- * Glass passivated junction

MECHANICAL DATA

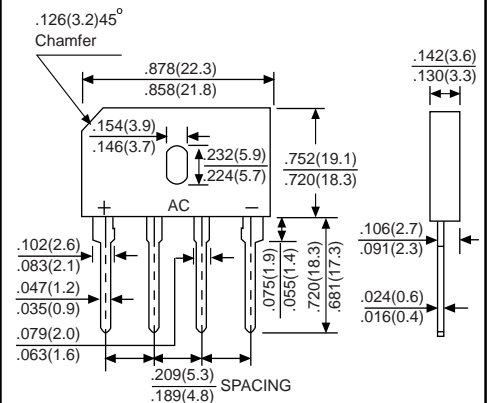
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Symbols molded or marked on body
- * Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.



GBU



Dimensions in inches and (millimeters)

	SYMBOL	GBU15A	GBU15B	GBU15D	GBU15G	GBU15J	GBU15K	GBU15M	UNITS	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts	
Maximum RMS Bridge Input Voltage	V _{RMS}	35	70	140	280	420	560	700	Volts	
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	Volts	
Maximum Average Forward Rectified Current @ T _c =100°C (with heatsink Note 2) (without heatsink)	I _(AV)					15				Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}					240				Amps
Maximum Forward Voltage Drop per element at 7.5A DC	V _F					1.1				Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	I _R					10				μAmps
						500				
I ² t Rating for Fusing (t<8.3ms)	I ² t					239				A ² Sec
Typical Junction Capacitance (Note1)	C _J					70				pF
Typical Thermal Resistance (Note 2)	R _{θJC}					2.2				°C/W
Storage Operating Temperature Range	T _J , T _{STG}					-55 to +150				°C

NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

2. Thermal Resistance from Junction to Case per element Unit mounted on 50x50x1.6mm Cu plate heat-sink.

RATING AND CHARACTERISTIC CURVES (GBU15A THRU GBU15M)

FIG. 1
MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

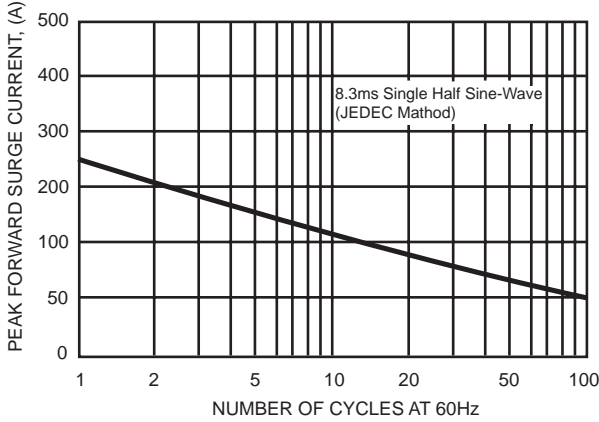


FIG. 2
TYPICAL FORWARD CURRENT DERATING CURVE

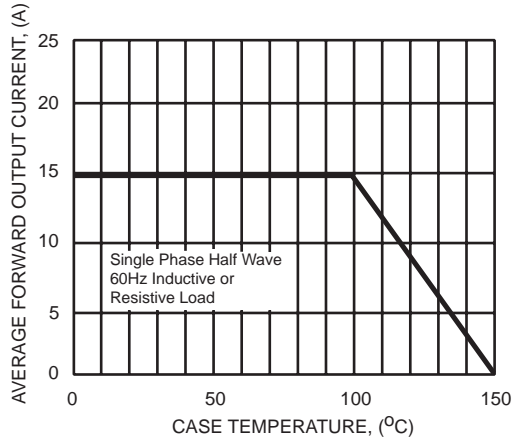


FIG. 3
TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

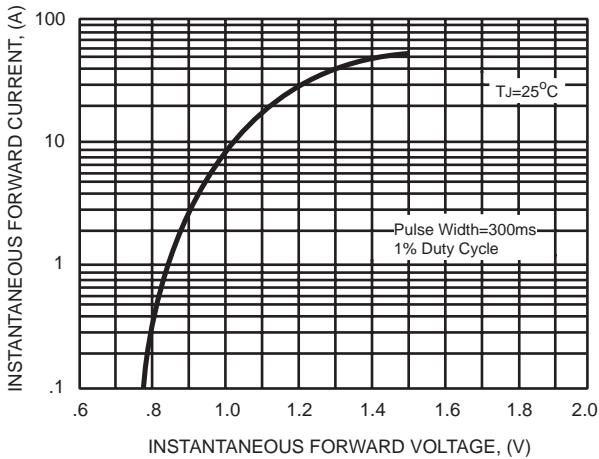
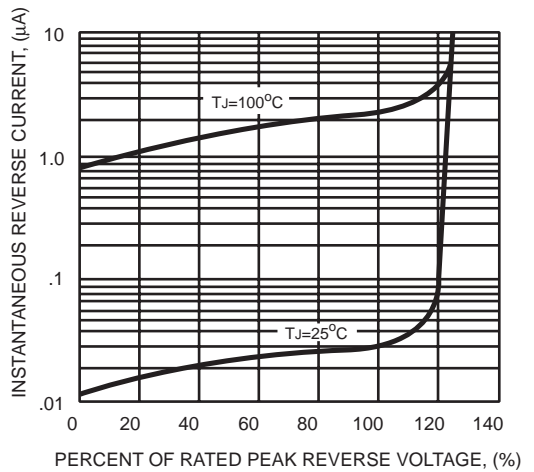


FIG. 4
TYPICAL REVERSE CHARACTERISTICS



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