DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

GBU25A THRU GBU25M

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIER

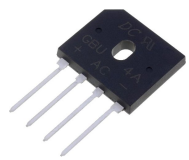
VOLTAGE RANGE - 50 to 1000 Volts *CURRENT - 25 Amperes*

FEATURES

* Ideal for printed circuit board
* Surge overload rating: 400 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



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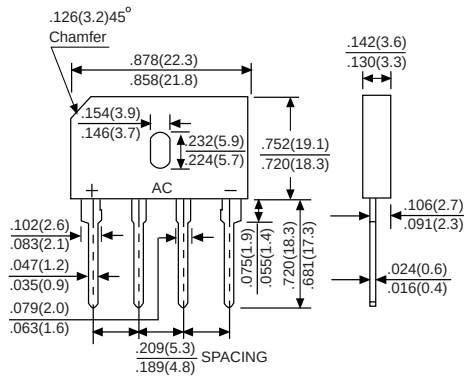


Dimensions in inches and (millimeters)

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%.

		SYMBOL	GBU25A	GBU25B	GBU25D	GBU25G	GBU25J	GBU25K	GBU25M	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 @Tc=100°C	(with heatsink Note 2)	$I_{(AV)}$	25							Amps
	(without heatsink)		4.2							
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	350							Amps
Maximum Forward Voltage Drop per element at 12.5A DC		V_F	1.0							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	@T_J = 25°C	I_R	10							μAmps
	@T_J = 125°C		500							
I^2t Rating for Fusing (t<8.3ms)		I^2t	200							A^2Sec
Typical Junction Capacitance (Note1)		C_J	70							pF
Typical Thermal Resistance (Note 2)		$R\theta JA$	2.2							°C/W
Operating Temperature Range		T_J	-55 to +150							°C
Storage Temperature Range		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 (GBU25A THRU GBU25M)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

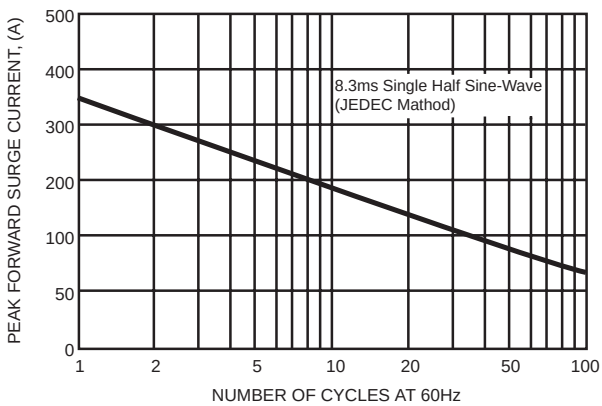


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

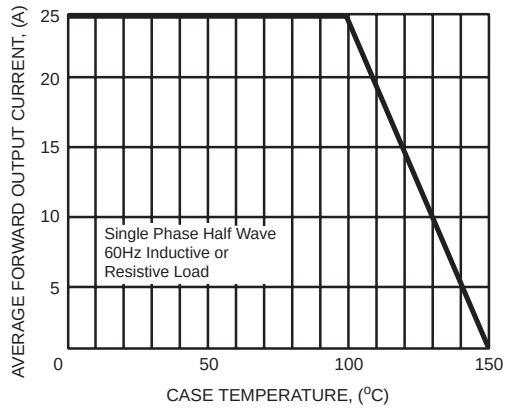


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

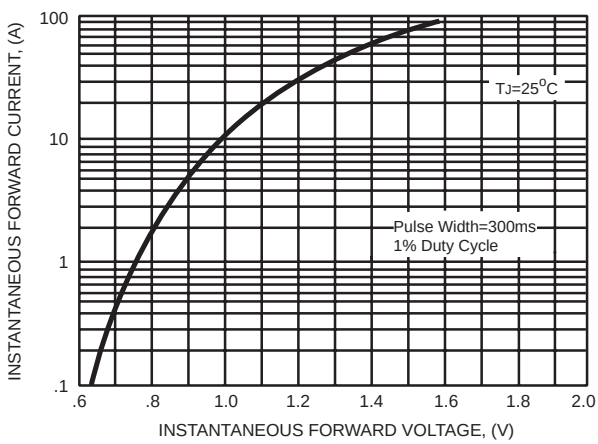
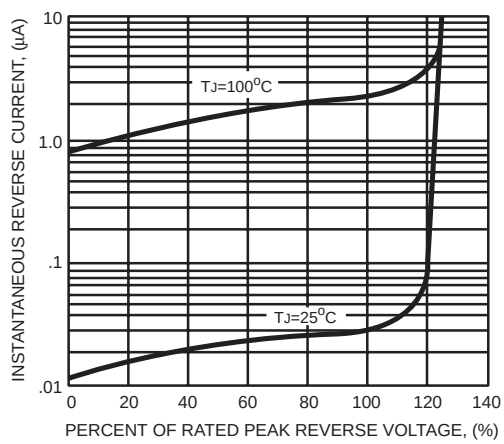


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



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