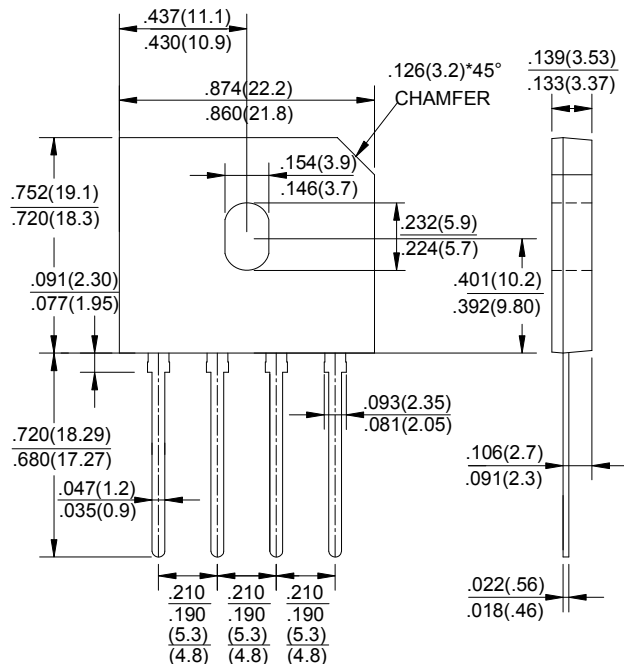


GBU6005 thru GBU610 SERIES

GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - 50 to 1000Volts FORWARD CURRENT - 6.0Amperes



Dimensions in inches and (millimeters)

Package: GBU

FEATURES

- Surge overload rating -175 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has U/L flammability classification 94V-0
- Mounting position:Any
- Weight: 0.138 ounces , 3.9grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

CHARACTERISTICS	SYMBOL	GBU6005	GBU601	GBU602	GBU604	GBU606	GBU608	GBU610	UNIT	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V	
Maximum Average Forward (with heatsink Note 2) Rectified Current @ T _c =100°C (without heatsink)	I _(AV)	6.0						2.8		A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}	175								A
Maximum Forward Voltage at 3.0A DC	V _F	1.1								V
Maximum DC Reverse Current @ T _J =25°C at Rated DC Blocking Voltage @ T _J =125°C	I _R	10.0						500		uA
I ² t Rating for Fusing (t<8.3ms)	I ² t	127								A ² s
Typical Junction Capacitance Per Element (Note1)	C _J	50								pF
Typical Thermal Resistance (Note2)	R _{θJC}	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 1.0MHz and applied reverse voltage of 4.0V DC.

2.Device mounted on 75mm*75mm*1.6mm cu plate heatsink.

GBU6005 thru GBU610 SERIES

GLASS PASSIVATED BRIDGE RECTIFIERS RATING AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

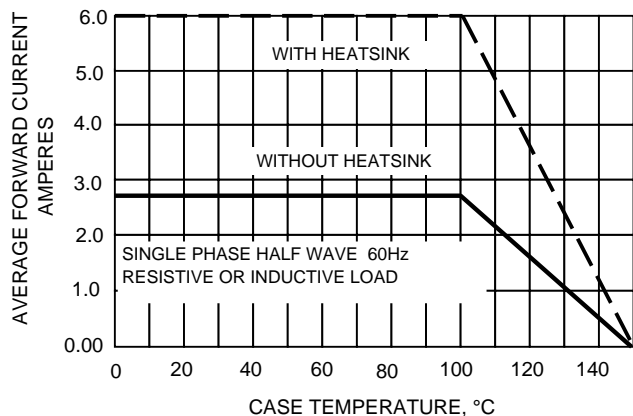


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

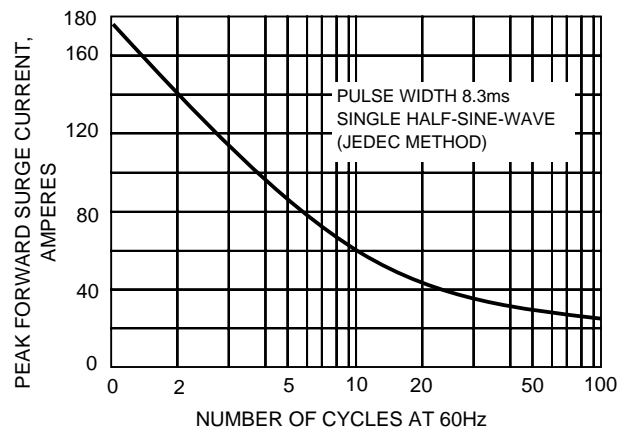


FIG.3-TYPICAL JUNCTION CAPACITANCE

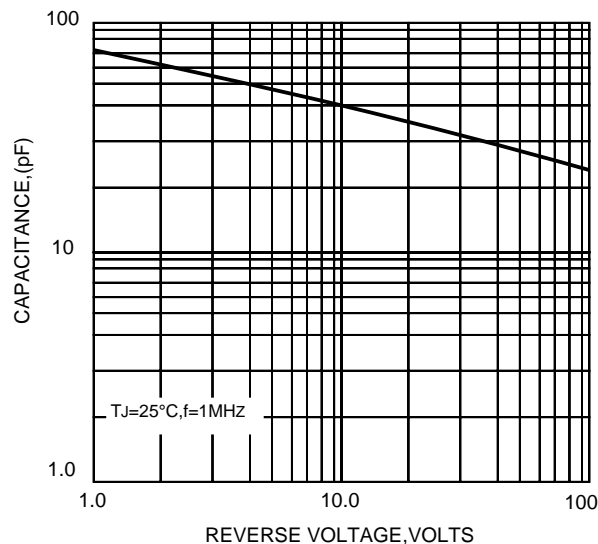


FIG.4-TYPICAL FORWARD CHARACTERISTICS

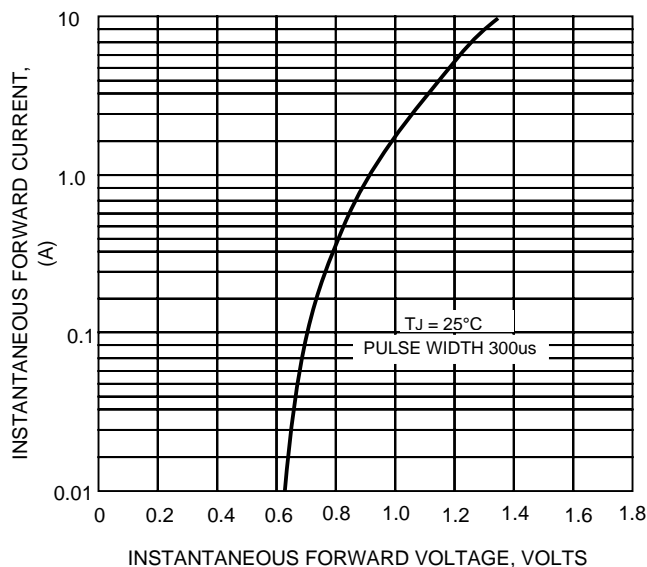


FIG.5-TYPICAL REVERSE CHARACTERISTICS

