Elektronische Bauelemente

GBU20005 ~ GBU2010

Voltage 50V ~ 1000V

20Amp Glass Passivated Bridge Rectifiers

RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

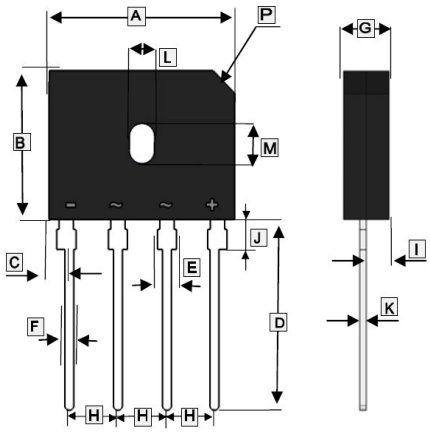
FEATURES

- I_o : 20A
- V_{RRM} : 50~1000V
- Glass passivated chip
- High surge forward current capability

APPLICATIONS

- General purpose 1 phase Bridge rectifier applications

GBU



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	21.7	22.3	H	4.83	5.33
B	18.2	18.8	I	1.8	2.66
C	3*45° TYP.		J	1.8	2.54
D	17.5	18.5	K	0.4	0.6
E	1.8	2.54	L	3.5	4.1
F	0.9	1.27	M	5.7 TYP.	
G	3.3	3.8			

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load. For capacitive load, de-rate current by 20%.)

Parameter		Symbol	Part Number							Unit
			GBU 20005	GBU 2001	GBU 2002	GBU 2004	GBU 2006	GBU 2008	GBU 2010	
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Average Rectified Output Current @ 60Hz sine wave, R-load	With heatsink T_C =87℃	I_O	20							A
	Without heatsink T_A =25℃		3.5							
Surge (Nonrepetitive) Forward Current @ 60H_Z sine wave, 1 cycle, T_J=25℃		I_{FSM}	220							A
Current Squared Time [1]		I^2t	200							A^2S
Dielectric Strength@ Terminals to case，AC 1 minute		V_{DIS}	2.5							KV
Mounting Torque@ Recommend torque：5kg.cm		Tor	8							Kg.cm
Peak Forward Voltage@ I_{FM}=10A, Pulse measurement, Rating of per diode		V_{FM}	1.1							V
Peak Reverse Current@ V_{RM}=V_{RRM} , Pulse measurement, Rating of per diode		I_{RRM}	10							μA
Thermal Resistance	Without heatsink	$R_{\theta JA}$	22							℃ / W
	With heatsink	$R_{\theta JC}$	1.5							
Junction and Storage temperature range		T_J,T_{STG}	-55~+150							℃

Notes：

1. 1ms≤t<8.3ms T_J=25℃ ，Rating of per diode

RATINGS AND CHARACTERISTIC CURVES

FIG1:Io-Tc Curve

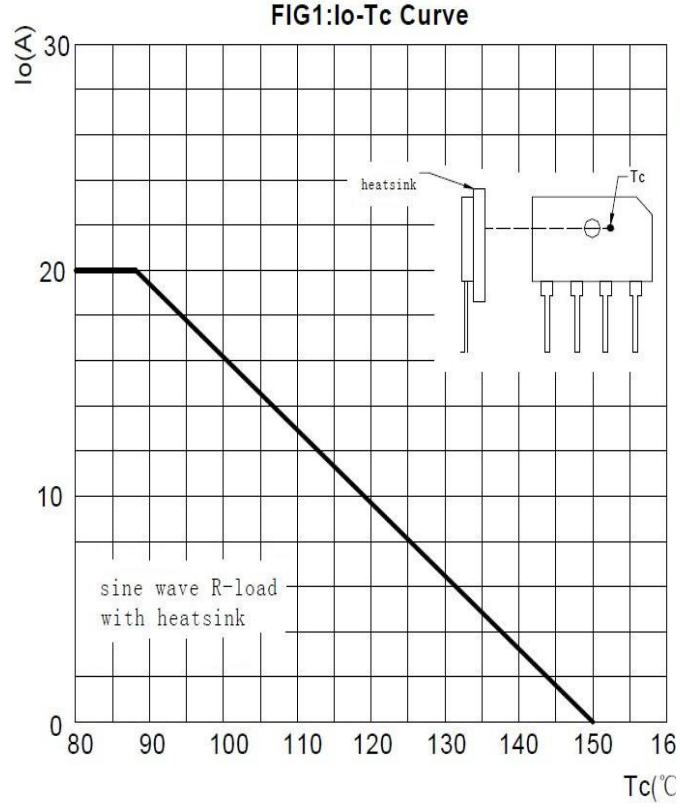


FIG2:Surge Forward Current Capadility

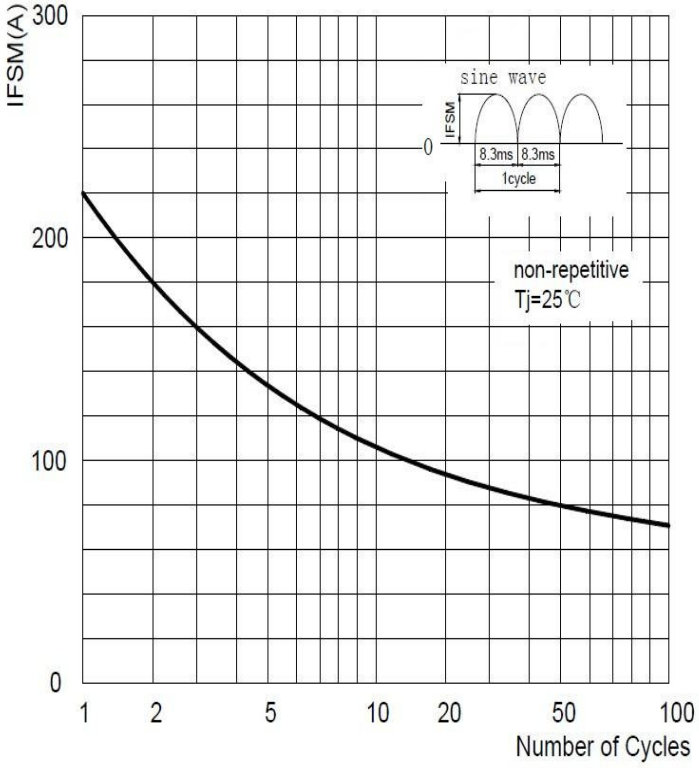


FIG3: Forward Voltage

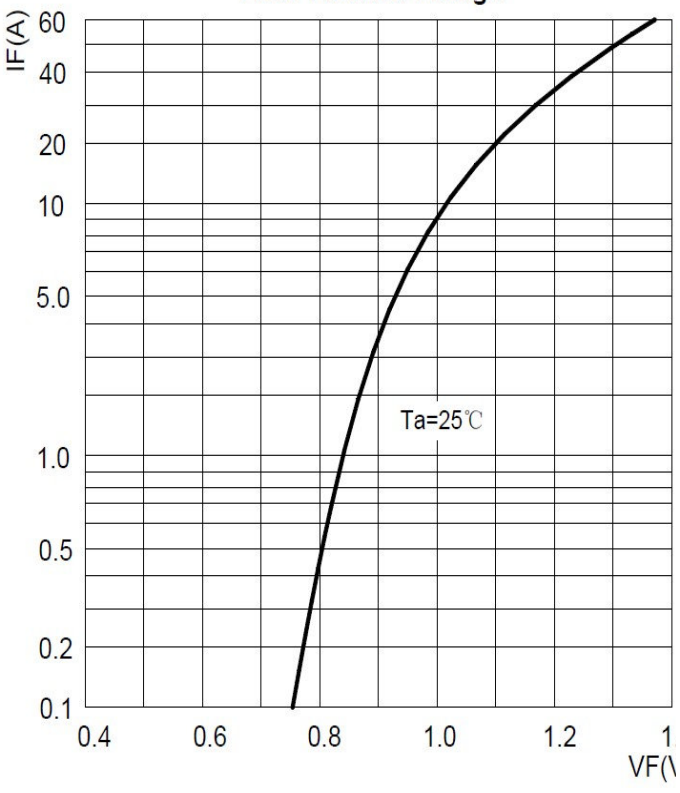


FIG4:Typical Reverse Characteristics