

GBU20005 THRU GBU2010

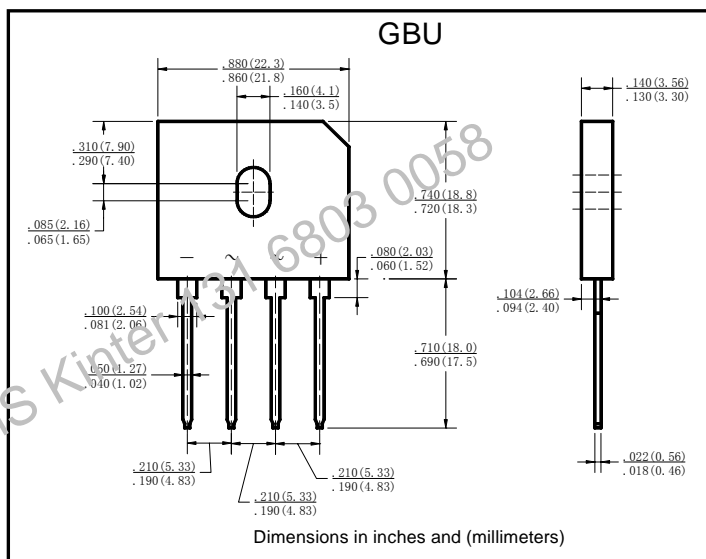
Features

- I_o 20A
- V_{RRM} 50V~1000V
- 玻璃钝化芯片
Glass passivated chip
- 耐正向浪涌电流能力高
High surge forward current capability

Applications

- 作一般电源单相桥式整流用
General purpose 1 phase Bridge rectifier applications

Outline Dimensions and Mark



Limiting Values (Absolute Maximum Rating)

参数名称 Item	符号 Symbol	单位 Unit	条件 Conditions	GBU20						
				005	01	02	04	06	08	10
反向重复峰值电压 Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	200	400	600	800	1000
平均整流输出电流 Average Rectified Output Current	I_o	A	60Hz正弦波, 电阻负载 60Hz sine wave, R-load	用散热片 $T_c = 87^\circ C$ With heatsink $T_c = 87^\circ C$	20					
				无散热片 $T_a = 25^\circ C$ Without heatsink $T_a = 25^\circ C$	3.5					
正向(不重复)浪涌电流 Surge(Non-repetitive) Forward Current	I_{FSM}	A	60Hz正弦波, 一个周期, $T_j = 25^\circ C$ 60Hz sine wave, 1 cycle, $T_j = 25^\circ C$	240						
正向浪涌电流的平方对电流浪涌持续时间的积分值 Current Squared Time	I^2t	A ² S	1ms ≤ t < 8.3ms $T_j = 25^\circ C$, 单个二极管 1ms ≤ t < 8.3ms $T_j = 25^\circ C$, Rating of per diode	240						
存储温度 Storage Temperature	T_{stg}	°C		-55 ~ +150						
结温 Junction Temperature	T_j	°C		-55 ~ +150						
绝缘耐压 Dielectric Strength	V_{dis}	KV	端子与外壳之间外加交流电, 一分钟 Terminals to case, AC 1 minute	2.5						
安装扭矩 Mounting Torque	Tor	kg · cm	推荐值: 5kg · cm Recommend torque: 5kg · cm	8						

Electrical Characteristics ($T_a = 25^\circ C$ Unless otherwise specified)

参数名称 Item	符号 Symbol	单位 Unit	测试条件 Test Condition	最大值 Max
正向峰值电压 Peak Forward Voltage	V_{FM}	V	$I_{FM} = 10A$, 脉冲测试, 单个二极管的额定值 $I_{FM} = 10A$, Pulse measurement, Rating of per diode	1.1
反向峰值电流 Peak Reverse Current	I_{RRM}	μA	$V_{RM} = V_{RRM}$, 脉冲测试, 单个二极管的额定值 $V_{RM} = V_{RRM}$, Pulse measurement, Rating of per diode	10
热阻 Thermal Resistance	$R_{\theta J-A}$	°C/W	结和环境之间, 无散热片 Between junction and ambient, Without heatsink	22
	$R_{\theta J-C}$		结和管壳之间, 用散热片 Between junction and case, With heatsink	1.5

■ Characteristics(Typical)

图1: I_o - T_c 曲线
FIG1: I_o - T_c Curve

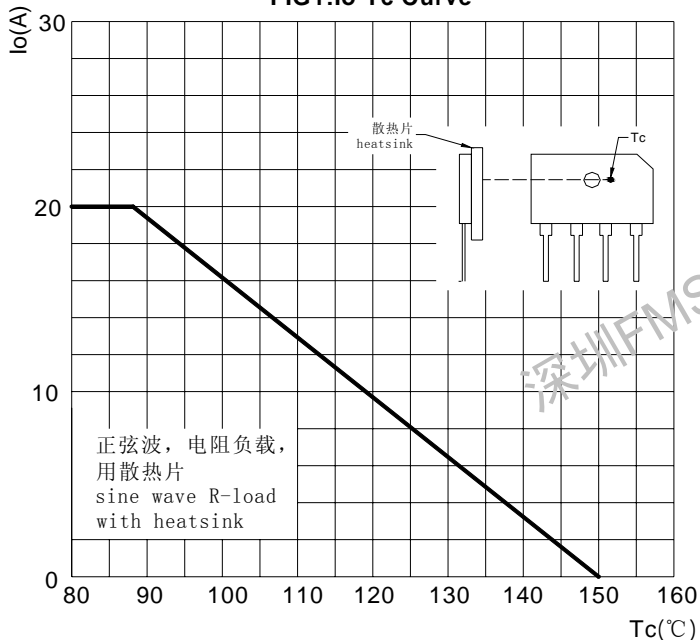


图2: 耐正向浪涌电流曲线
FIG2: Surge Forward Current Capadility

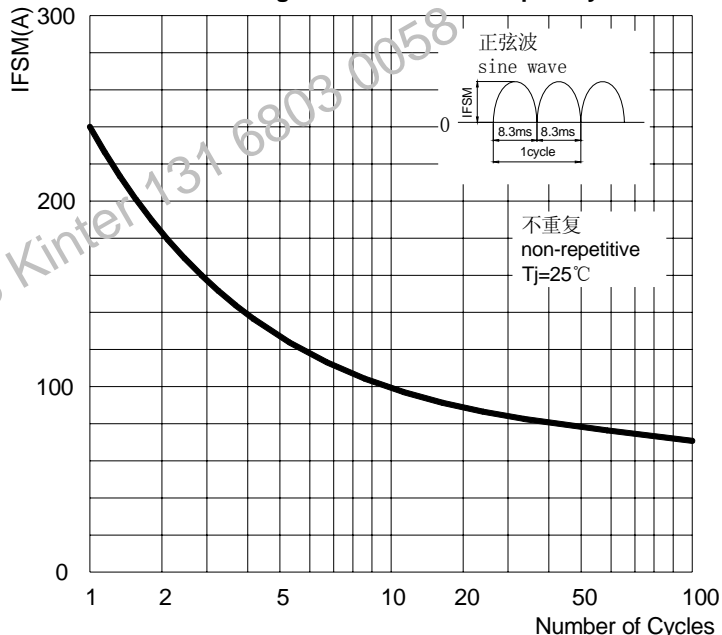


图3: 正向电压曲线
FIG3: Forward Voltage

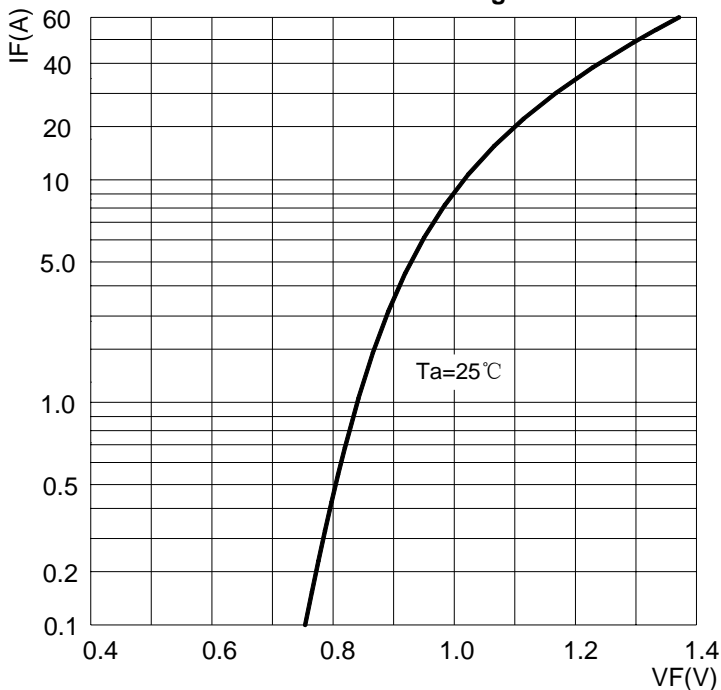


图4: 反向电流曲线
FIG4: Typical Reverse Characteristics

