Bridge Rectifier

GBU20005 THRU GBU2010

Formosa MS

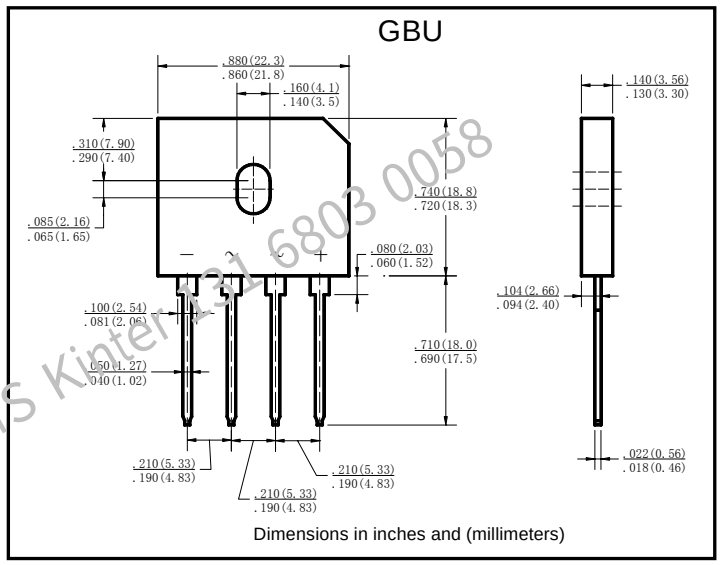
■ Features

- 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



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■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℃ With heatsink T_c =87℃	20						
				无散热片 T_a =25℃ Without heatsink T_a =25℃	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℃ 60Hz sine wave, 1 cycle, T_j=25℃		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^2S	1ms≤t<8.3ms Tj=25℃，单个二极管 1ms≤t<8.3ms Tj=25℃，Rating of per diode		240						
存储温度 Storage Temperature	T_{stg}	℃			-55 ~+150						
结温 Junction Temperature	T_j	℃			-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℃ 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	$R_{\theta J-A}$	℃/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：Io-Tc曲线
FIG1:Io-Tc Curve

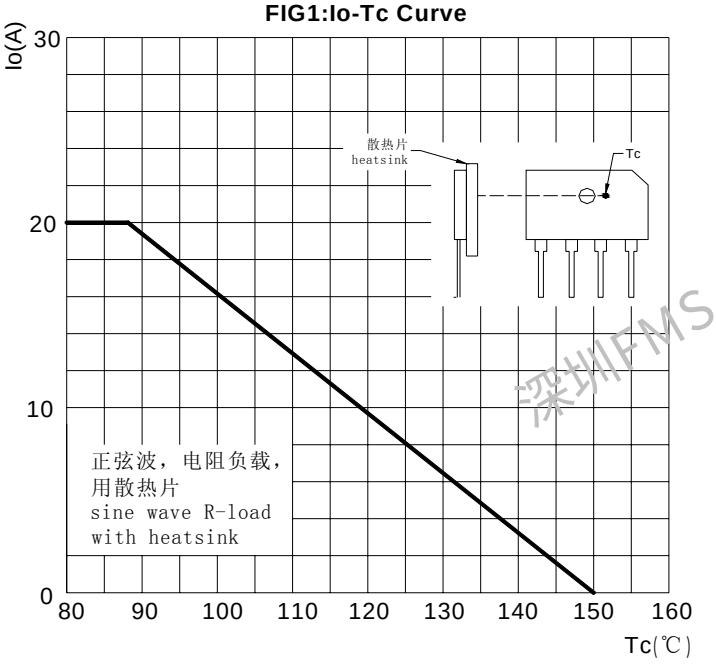

图2：耐正向浪涌电流曲线
FIG2:Surge Forward Current Capadility

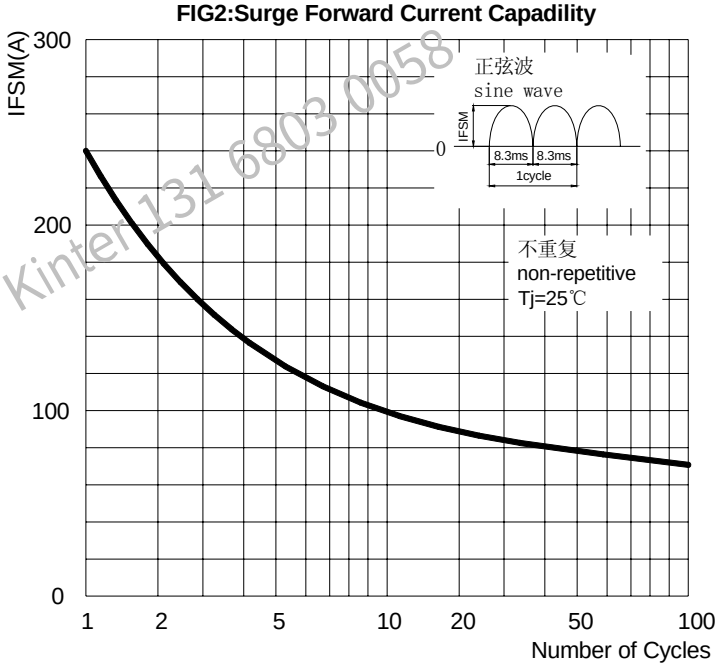

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图3：正向电压曲线
FIG3: Forward Voltage

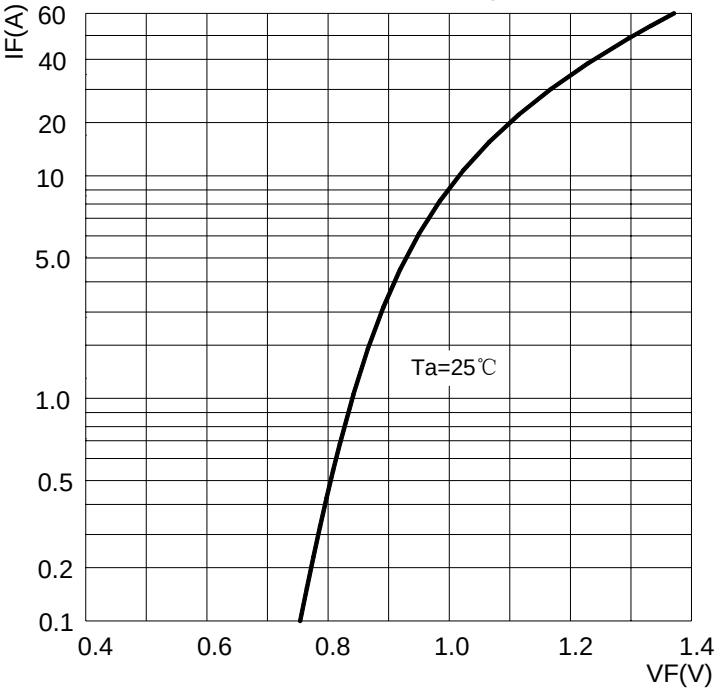
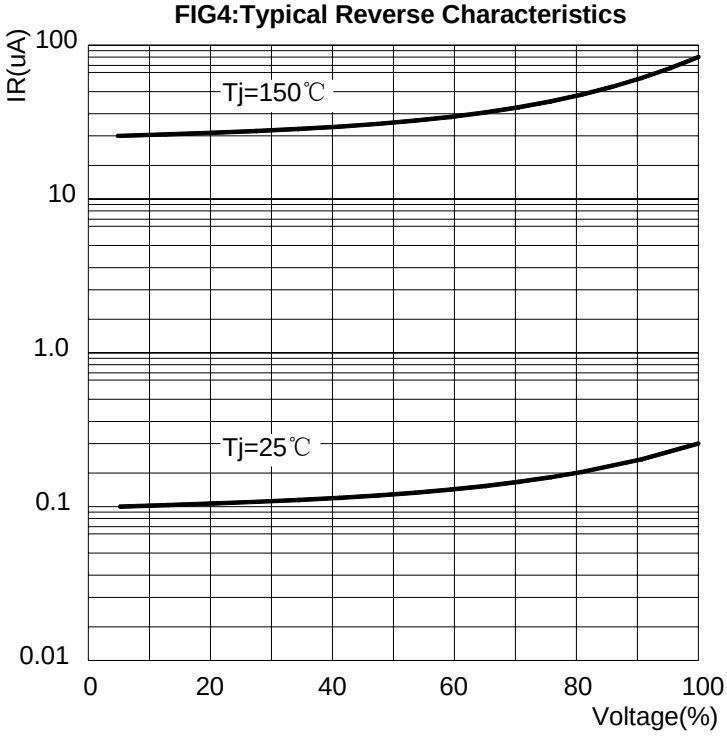


图4：反向电流曲线
FIG4:Typical Reverse Characteristics



Document ID	Issued Date	Revised Date	Revision	Page.
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