

## 50A,800V-1600V 三相玻璃钝化整流桥 50A,800V-1600V Three Phase Glass Passivated Bridge Rectifier

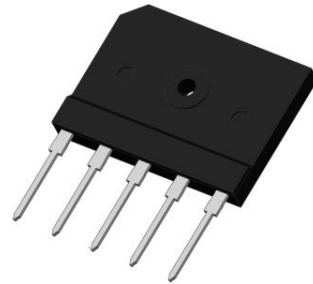
### ■特征 Features

- 玻璃钝化芯片  
Glass passivated chip
- 低反向漏电流  
Low reverse leakage current
- 高耐浪涌电流能力  
High surge current capability
- UL 档案编号# E249161  
UL recognized file # E249161
- 符合 RoHS 指令 2011/65/EU  
Compliant to RoHS directive 2011/65/EU

关键参数 KEY PARAMETERS		
参数 PARAMETER	数值 VALUE	单位 UNIT
$I_{F(AV)}$	50	A
$V_{RRM}$	800-1600	V
$I_{FSM}$	500	A
Package	SGBJ	

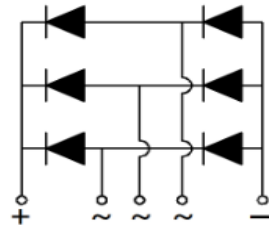
### ■应用范围 Applications

- 伺服器  
Server
- 变频器  
Frequency converter
- 工业电源  
Industrial power supply



### ■机械参数 Mechanical Data

- 本体: SGBJ  
Case : SGBJ
- 极性: 极性符号铸在管体上  
Polarity: Polarity symbols being marked on body
- 安装扭矩: 8.0kgf.cm  
Mounting torque: 8.0kgf.cm max
- 重量: 约 10 克  
Weight : About 10 grams



### ■最大额定值 Maximum Ratings @ Ta = 25°C unless otherwise noted

参数 PARAMETER	符号 SYMBOL	SGBJ5008	SGBJ5010	SGBJ5012	SGBJ5016	单位 UNIT
反向重复峰值电压 Maximum recurrent peak reverse voltage	$V_{RRM}$	800	1000	1200	1600	V
平均整流输出电流 Average rectified output current	$I_{(AV)}$	50				A
带散热片, $T_c=85^\circ\text{C}$ with heatsink, $T_c=85^\circ\text{C}$						
最大正向浪涌电流, 8.3ms 单半正弦波叠加在额定负载上 Peak surge forward current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	500				A
热容值, $1\text{ms}<t<8.3\text{ms}$ , $T_j=25^\circ\text{C}$ , 单个二极管 Rating for fusing, $1\text{ms}<t<8.3\text{ms}$ , $T_j=25^\circ\text{C}$ , Rating of per diode	$I^2t$	1037				$\text{A}^2\text{s}$
结温 Junction temperature	$T_j$	-55 ~ +150				$^\circ\text{C}$
存储温度 Storage temperature	$T_{STG}$	-55 ~ +150				$^\circ\text{C}$
绝缘耐压, 端子与外壳之间外加交流电 1 分钟 Dielectric strength, terminals to case AC 1 minute	$V_{dis}$	2.5				KV

## ■电性特性 Electrical Characteristics @ Ta = 25°C unless otherwise noted

参数 PARAMETER	条件 CONDITIONS	符号 SYMBOL	额定值 RATED VALUE	单位 UNIT
正向峰值电压 Peak Forward Voltage	$I_F = 25A$	$V_F$	1.1	V
反向峰值电流 Peak Reverse Current	VR=VRRM, 脉冲测试, 单个二极管的额定值 VR=VRRM, Pulse measurement Rating of per diode	$T_j = 25^\circ C$	5	$\mu A$
		$T_j = 125^\circ C$	500	

## ■热特性 Thermal Characteristics @ Ta = 25°C unless otherwise noted

参数 PARAMETER	符号 SYMBOL	额定值 RATED VALUE	单位 UNIT
结到环境的热阻, 无散热片 Junction to ambient thermal resistance, without heatsink	$R_{\theta JA}$	18	$^\circ C/W$
结到管壳的热阻, 有散热片 Junction to case thermal resistance, with heatsink	$R_{\theta JC}$	1.2	$^\circ C/W$

## ■特性曲线 Characteristic Curve

FIG1. Derating Curve For Output Rectified Current

图 1. 电流降额曲线

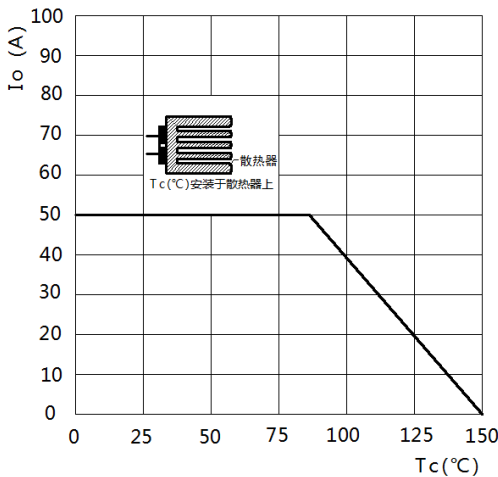


FIG2. Maximum Non-Repetitive Peak Forward Surge Current Per Bridge Element

图 2. 最大正向不重复峰值浪涌电流

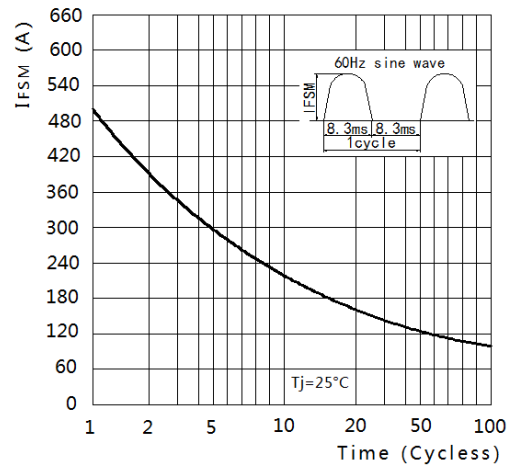


FIG3. Typical Reverse Characteristics Per Bridge Element

图 3. 典型反向特性

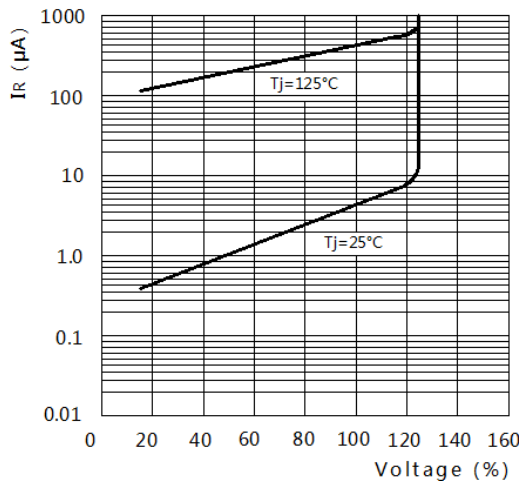
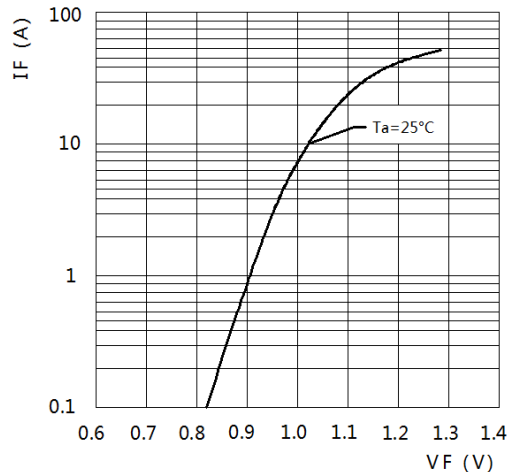
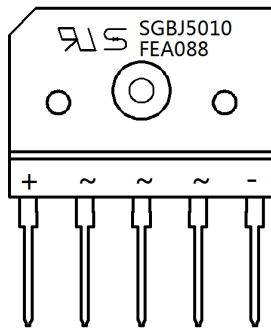


FIG4. Typical Forward Characteristics Per Bridge Element

图 4. 典型正向特性



■ 标记图 Marking Diagram



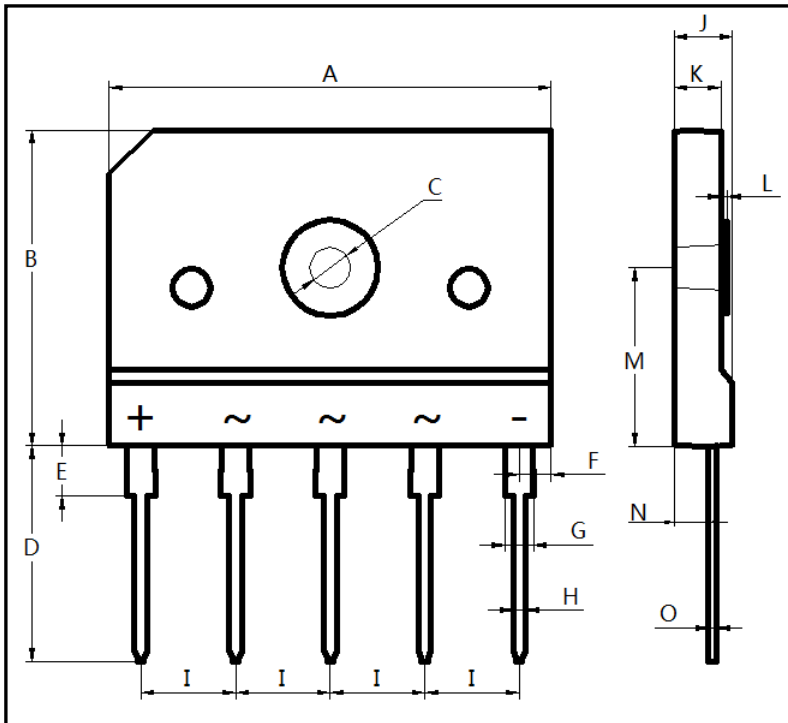
SGBJ5010：标识代码

Marking code

FEA088：制程码

Process code

■ 尺寸图 Dimension Drawing



Dim.	Unit(mm)		Unit(inch)	
	Min.	Max.	Min.	Max.
A	34.50	35.50	1.358	1.398
B	24.50	25.50	0.965	1.004
C	2.90	3.50	0.114	0.138
D	16.60	17.60	0.654	0.693
E	3.70	4.30	0.146	0.169
F	2.20	2.80	0.087	0.110
G	2.00	2.60	0.079	0.102
H	0.90	1.10	0.035	0.043
I	7.20	7.80	0.283	0.307
J	4.30	4.90	0.169	0.193
K	3.40	4.00	0.134	0.157
L	0.20	0.80	0.008	0.031
M	13.80	14.40	0.543	0.567
N	2.50	2.90	0.098	0.114
O	0.55	0.75	0.022	0.030