

75A,1000V-1600V 三相玻璃钝化整流桥 75A,1000V-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
$I_{F(AV)}$	75	A
V_{RRM}	1000-1600	V
I_{FSM}	750	A
Package	SGBPC	

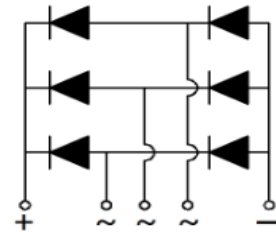
■应用范围 Applications

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



■机械参数 Mechanical Data

- 本体: SGBPC
Case : SGBPC
- 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 31 克
Weight : About 31 grams



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

参数 PARAMETER	符号 SYMBOL	SGBPC7510	SGBPC7512	SGBPC7516	单位 UNIT
反向重复峰值电压 Maximum recurrent peak reverse voltage	V_{RRM}	1000	1200	1600	V
平均整流输出电流 Average rectified output current	$I_{(AV)}$	75			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}	750			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	2334			A^2s
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}	2.0			KV

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

参数 PARAMETER	条件 CONDITIONS	符号 SYMBOL	SGBPC 7510	SGBPC 7512	SGBPC 7516	单位 UNIT
正向峰值电压 Peak Forward Voltage	$I_F = 37.5A$	V_F	1.1		1.2	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	I_R	5			μA
			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	°C/W
结到管壳的热阻, 有散热片 Junction to case thermal resistance, with heatsink	$R_{\theta JC}$	0.75	°C/W

■ 特性曲线 Characteristic Curve

FIG1. Derating Curve For Output Rectified Current

图 1. 电流降额曲线

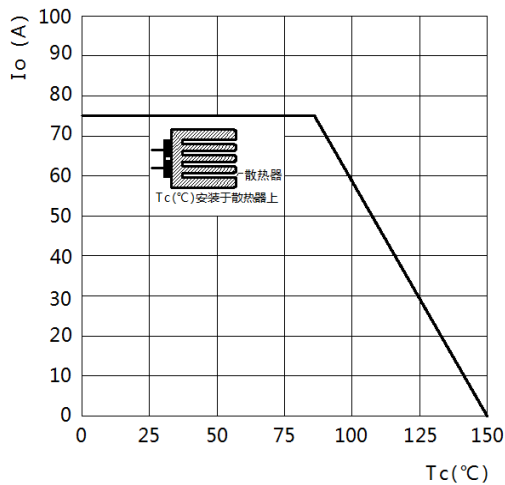


FIG2. Maximum Non-Repetitive Peak Forward Surge Current Per Bridge Element

图 2. 最大正向不重复峰值浪涌电流

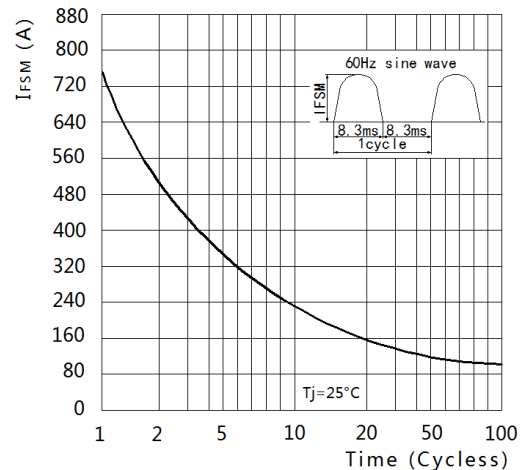


FIG3. Typical Reverse Characteristics Per Bridge Element

图 3. 典型反向特性

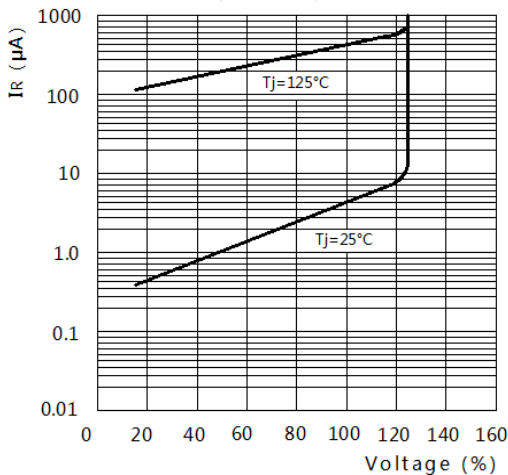
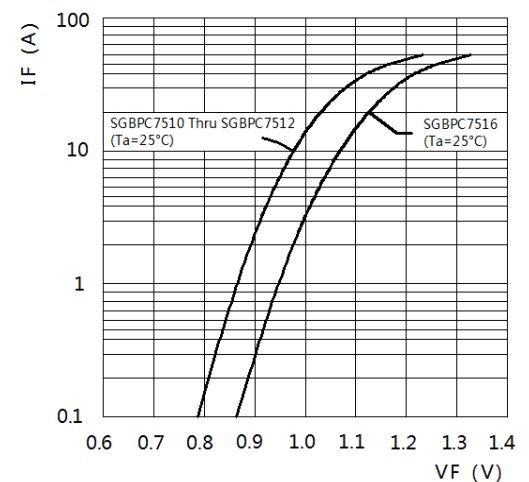
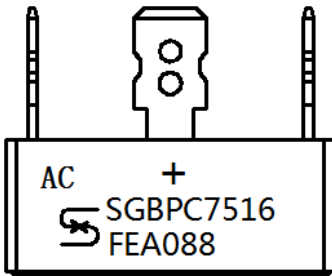


FIG4. Typical Forward Characteristics Per Bridge Element

图 4. 典型正向特性



■ 标记图 Marking Diagram



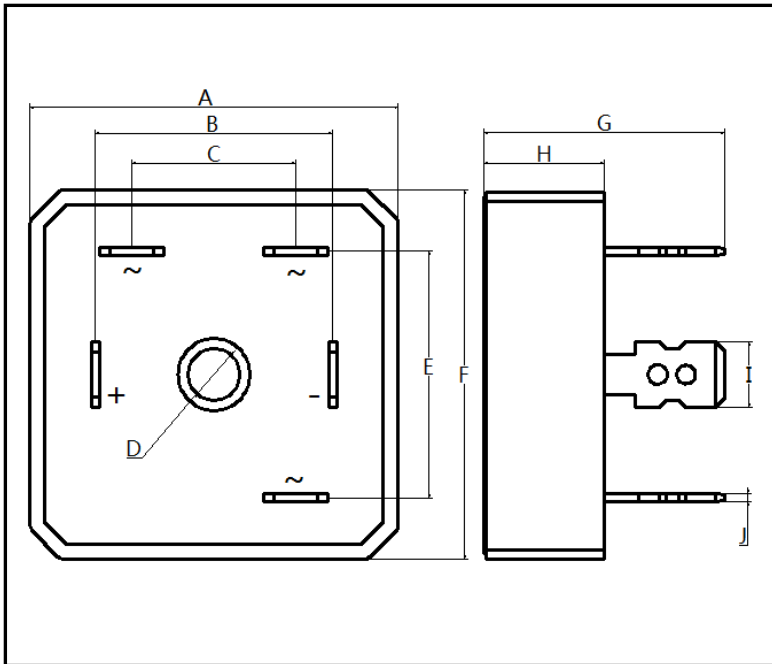
SGBPC7516 : 标识代码

Marking code

FEA088 : 制程码

Process code

■ 尺寸图 Dimension Drawing



Dim.	Unit(mm)		Unit(inch)	
	Min.	Max.	Min.	Max.
A	35.50	36.50	1.398	1.437
B	22.70	23.70	0.894	0.933
C	15.50	16.50	0.610	0.650
D	4.50	5.50	0.177	0.217
E	23.50	24.50	0.925	0.965
F	35.50	36.50	1.398	1.437
G	22.50	24.50	0.886	0.965
H	11.20	12.20	0.441	0.480
I	6.10	6.50	0.240	0.256
J	0.60	1.00	0.024	0.039