

25A,600V-1200V 单相玻璃钝化整流桥

25A,600V-1200V Single Phase Glass Passivated Bridge Rectifier

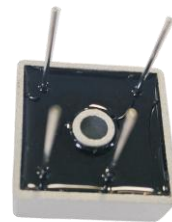
■ 特征 Features

- 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

关键参数 KEY PARAMETERS		
参数 PARAMETER	数值 VALUE	单位 UNIT
$I_{F(AV)}$	25	A
V_{RRM}	600-1200	V
I_{FSM}	300	A
Package	KBPC-W	

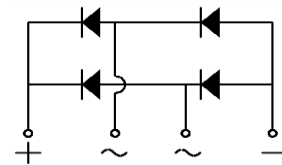
■ 应用范围 Applications

- 电焊机
Electric welder
- 工业电源
Industrial power supply
- 逆变器
Inverter
- 不间断电源
Uninterruptible power supply



■ 机械参数 Mechanical Data

- 本体 : KBPC-W
Case: KBPC-W
- 极性 : 极性符号铸在管体上
Polarity: Polarity symbols being marked on body
- 安装扭矩 : 12.0 kgf.cm
Mounting torque: 12.0 kgf.cm max
- 重量 : 约 17 克
Weight: About 17 grams



■ 最大额定值 Maximum Ratings @ $T_a = 25^\circ\text{C}$ unless otherwise noted

参数 PARAMETER	符号 SYMBOL	KBPC2506W	KBPC2508W	KBPC2510W	KBPC2512W	单位 UNIT
反向重复峰值电压 Maximum recurrent peak reverse voltage	V_{RRM}	600	800	1000	1200	V
平均整流输出电流 Average rectified output current	$I_{(AV)}$	25				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}	300				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	508				A^2s
结温 Junction temperature	T_j	$-55 \sim +150$				$^\circ\text{C}$
存储温度 Storage temperature	T_{STG}	$-55 \sim +150$				$^\circ\text{C}$
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	$I_F = 12.5A$	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	I_R	5	μA
	$T_J = 25^{\circ}C$		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	$R_{\theta JA}$	26	$^{\circ}C/W$
结到管壳的热阻, 有散热片 Junction to case thermal resistance, with heatsink	$R_{\theta JC}$	1.3	$^{\circ}C/W$

■ 特性曲线 Characteristic Curve

FIG1. Derating Curve For Output Rectified Current

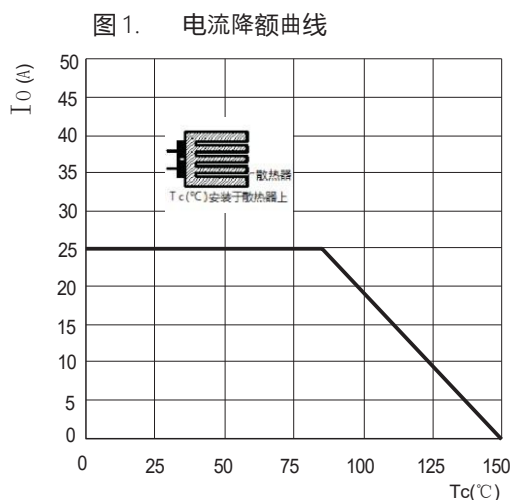


FIG2. Maximum Non-Repetitive Peak Forward Surge Current Per Bridge Element

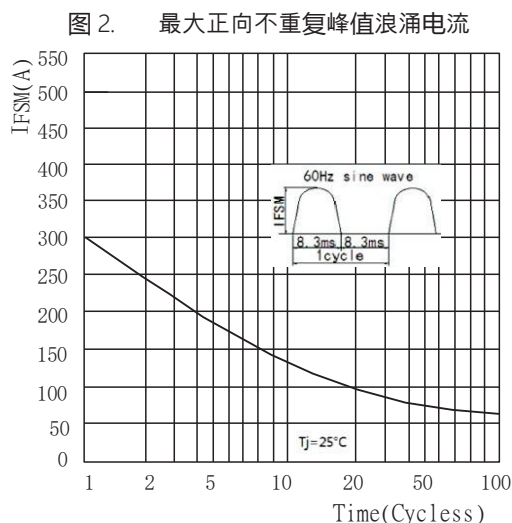


FIG3. Typical Reverse Characteristics Per Bridge Element

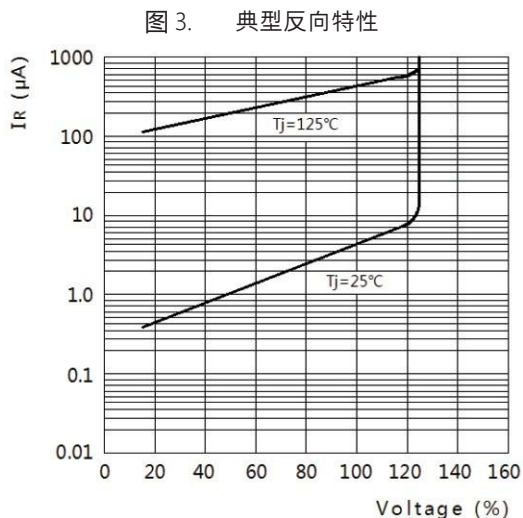
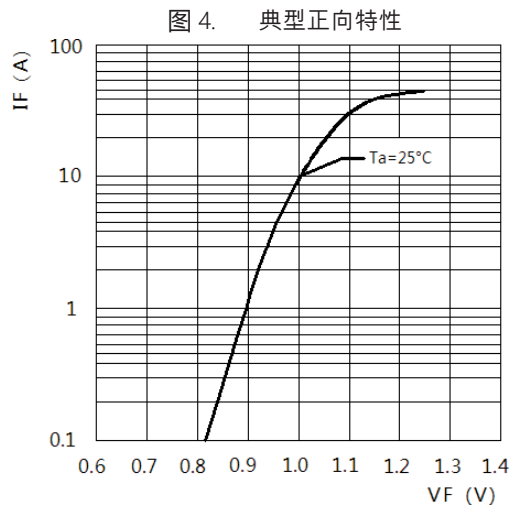
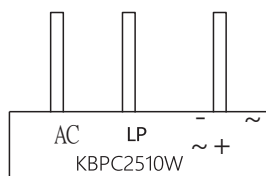


FIG4. Typical Forward Characteristics Per Bridge Element



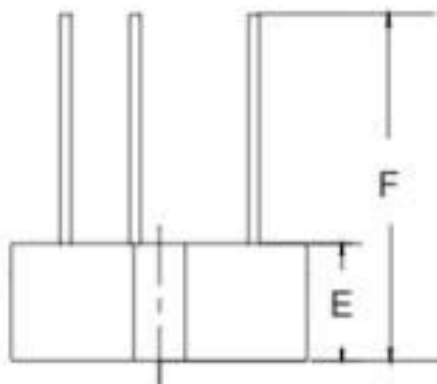
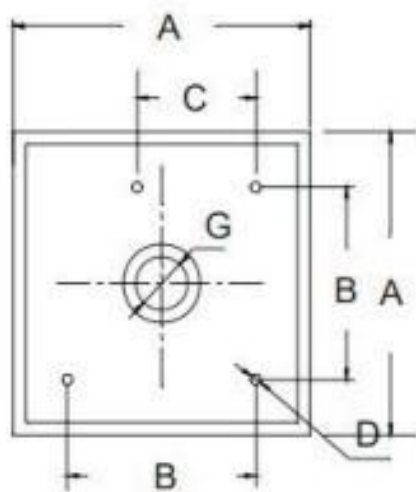
■ 标记图 Marking Diagram



KBPC2510W : 标识代码

Marking code

■ 尺寸图 Dimension Drawing



KBPC-W		
Dim	Min	Max
A	28.2	28.8
B	17.1	19.1
C	10.4	12.4
D	0.95	1.05
E	10.8	11.2
F	30	
G	5	5.5