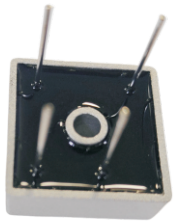
25A,400V-1200V 单相玻璃钝化整流桥

25A,400V-1200V Single Phase Glass Passivated Bridge Rectifier

■特征 Features

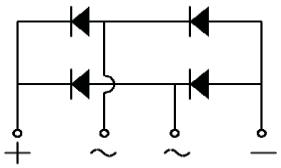
玻璃钝化芯片
Glass passivated chip
低反向漏电流
Low reverse leakage current
高耐浪涌电流能力
High surge current capability

关键参数 KEY PARAMETERS		
参数 PARAMETER	数值 VALUE	单位 UNIT
$I_{F(AV)}$	25	A
V_{RRM}	400-1200	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: About17 grams

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

参数 PARAMETER		符号 SYMBOL	KBPC2504W	KBPC2506W	KBPC2508W	KBPC2510W	KBPC2512W	单位 UNIT
反向重复峰值电压 Maximum recurrent peak reverse voltage		V_{RRM}	400	600	800	1000	1200	V
平均整流输出电流 Averagerectifiedoutputcurrent	带散热片, T_C=85℃ with heatsink, T_C=85℃	$I_{(AV)}$	25					A
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, 8.3mssingle half sinewave superimposed on rated load		I_{FSM}	300					A
热容值, 1ms<t<8.3msTj=25℃, 单个二极管 Rating for fusing1ms<t<8.3msTj=25℃, Rating of per diode		I^2t	508					A^2s
结温 Junctiontemperature		Tj	-55 ~ +150					℃
存储温度 Storagetemperature		T_{STG}	-55 ~ +150					℃
绝缘耐压, 端子与外壳之间外加交流电 1 分钟 Dielectric strengthterminals to case AC 1 minute		V_{dis}	2.5					KV

■电性特性 Electrical Characteristics @ Ta = 25℃ 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 measurementRating of per diode	Tj=25℃	I_R	5	μA
		Tj=125℃		500	

■热特性 Thermal Characteristics @ Ta =25℃ 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 ambientthermalresistance, without heatsink	$R_{\theta JA}$	26	℃/W
结到管壳的热阻 ,有散热片 Junction to casethermalresistance, with heatsink	$R_{\theta JC}$	1.3	℃/W

■特性曲线 Characteristic Curve

FIG 1.Derating Curve For Output Rectified Current

图 1. 电流降额曲线

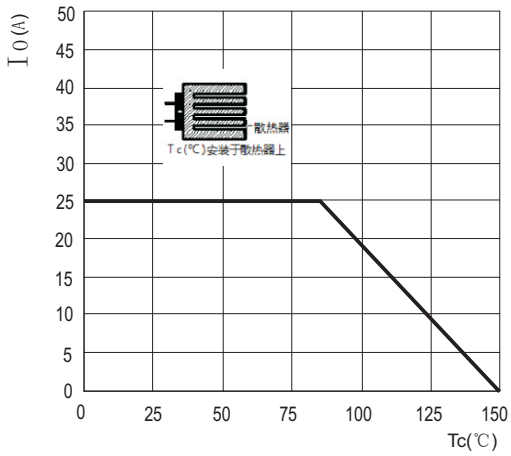


FIG2 .Maximum Non-Repetitive Peak ForwardSurge CurrentPer Bridge Element

图 2. 最大正向不重复峰值浪涌电流

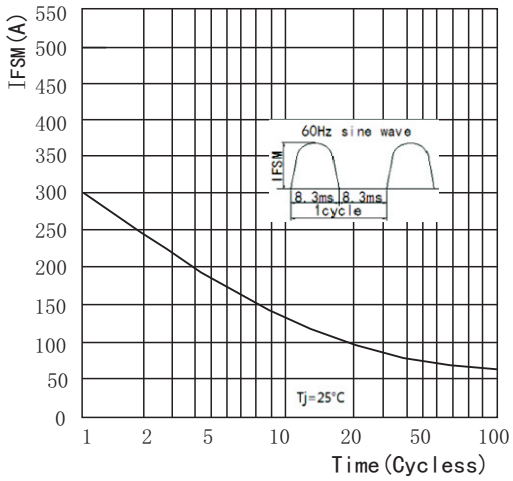
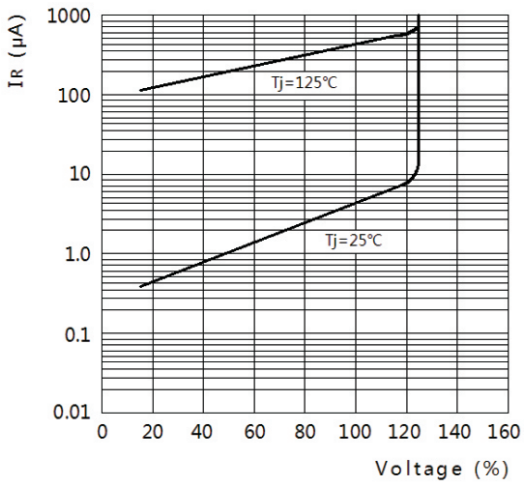


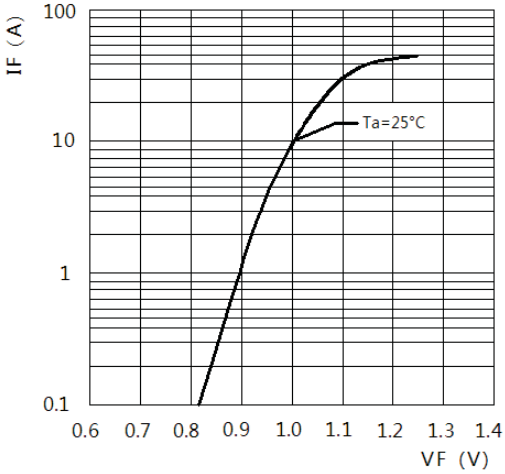
FIG3.Typical Reverse Characteristics Per Bridge Element

图 3. 典型反向特性

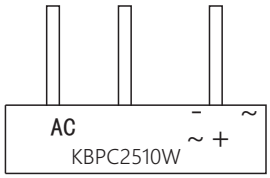


FI G4.Typical Forward Characteristics Per Bridge Element

图 4. 典型正向特性



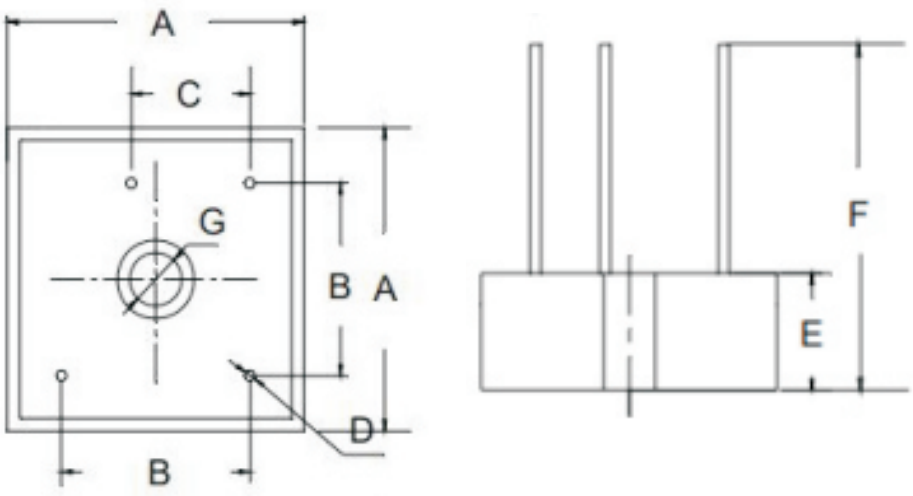
■标记图 Marking Diagram



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