



# SKBPC5004 THRU SKBPC5016

## 桥式整流器 Bridge Rectifier

### ■特征 Features

- $I_o$  50A
- $V_{RRM}$  400V~1600V
- 玻璃钝化芯片  
Glass passivated chip
- 耐正向浪涌电流能力高  
High surge forward current capability

### ■用途 Applications

- 作一般电源三相桥式整流用  
General purpose 3 phase Bridge rectifier applications

### ■极限值（绝对最大额定值）

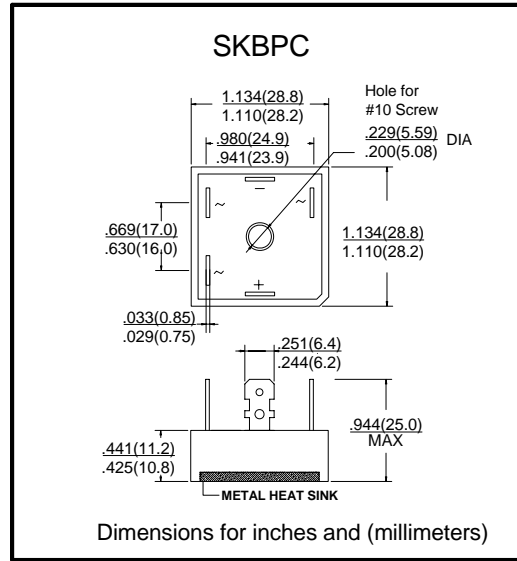
#### Limiting Values (Absolute Maximum Rating)

参数名称 Item	符号 Symbol	单位 Unit	条件 Conditions	SKBPC50						
				04	06	08	10	12	14	16
反向重复峰值电压 Repetitive Peak Reverse Voltage	$V_{RRM}$	V		400	600	800	1000	1200	1400	1600
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 用散热器 $T_c=55^\circ\text{C}$ With heatsink $T_c=55^\circ\text{C}$	50						
正向（不重复）浪涌电流 Surge(Nonrepetitive) Forward Current	$I_{FSM}$	A	60Hz正弦波, 一个周期, $T_a=25^\circ\text{C}$ 60Hz sine wave, 1 cycle, $T_a=25^\circ\text{C}$	500						
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	$I^2t$	$\text{A}^2\text{S}$	$1\text{ms} \leq t < 8.3\text{ms}$ $T_j=25^\circ\text{C}$ 单个二极管 $1\text{ms} \leq t < 8.3\text{ms}$ $T_j=25^\circ\text{C}$ Rating of per diode	1040						
存储温度 Storage Temperature	$T_{stg}$	$^\circ\text{C}$		-40 ~ +150						
结温 Junction Temperature	$T_j$	$^\circ\text{C}$		-40 ~ +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						

### ■电特性（ $T_a=25^\circ\text{C}$ 除非另有规定）

#### Electrical Characteristics ( $T_a=25^\circ\text{C}$ 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	$I_{FM}=17\text{A}$ , 脉冲测试, 单个二极管的额定值 $I_{FM}=17\text{A}$ , Pulse measurement, Rating of per diode	1.2
反向峰值电流 Peak Reverse Current	$I_{RRM}$	$\mu\text{A}$	$V_{RM}=V_{RRM}$ , 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	$R_{\theta J-C}$	$^\circ\text{C}/\text{W}$	结和管壳之间, 用散热器 Between junction and case, With heatsink	0.9



### ■外形尺寸和印记 Outline Dimensions and Mark



■特性曲线（典型） Characteristics(Typical)

图1:  $I_o$ - $T_a$ 曲线  
FIG1: $I_o$ - $T_a$  Curve

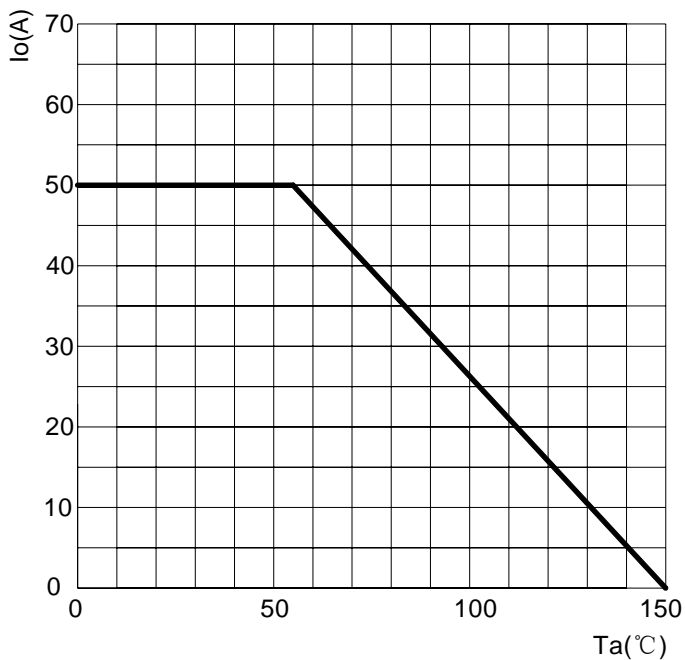


图2: 耐正向浪涌电流曲线  
FIG2:Surge Forward Current Capacity

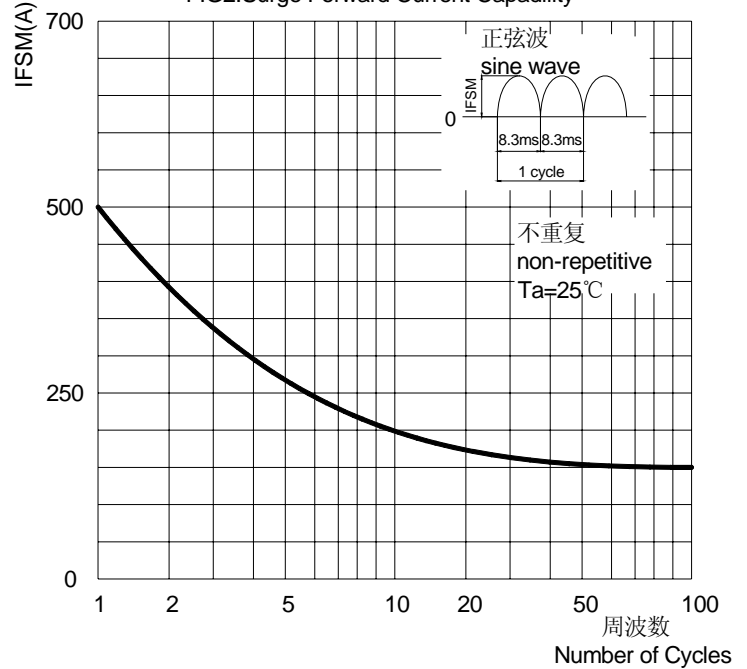


图3: 正向电压曲线  
FIG3:Instantaneous Forward Voltage

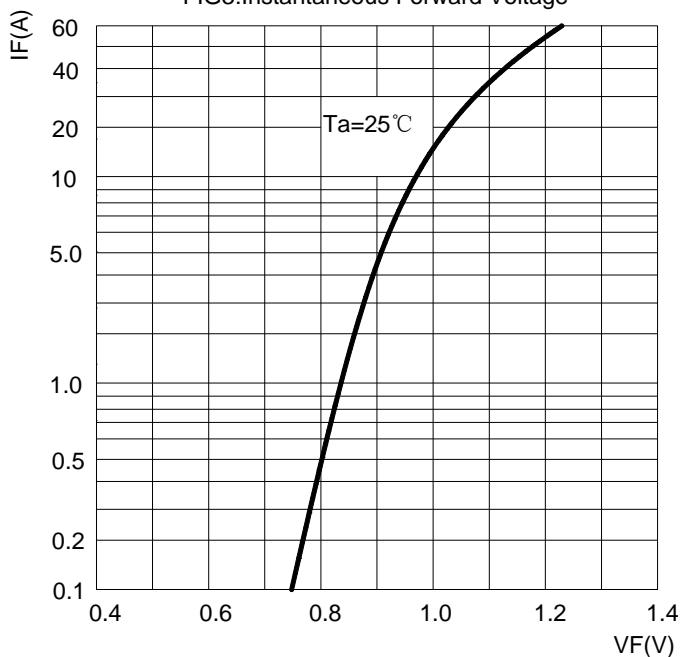


图4: 反向电流曲线  
FIG4:Typical Reverse Characteristics

