

**Three- Phase Bridge Rectifier Modules**

**Reverse Voltage - 800 to 1800 V**

**Forward Current - 35 A**

**FEATURES**

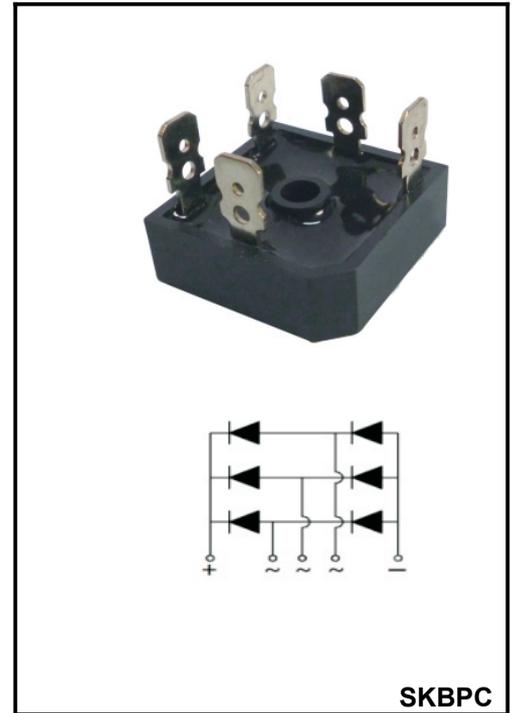
- ◆Glass passivated chip
- ◆Low reverse leakage current
- ◆High surge current capability

**APPLICATIONS**

- ◆Frequency converter
- ◆Industrial power supply

**MECHANICAL DATA**

- ◆Case:SKBPC
- ◆Polarity: Polarity symbols being marked on body
- ◆Mounting torque: 12.0 kgf.cm max
- ◆Weight : About 18 g rams



**Maximum Ratings @ Ta = 25°C unless otherwise noted**

Parameter	Symbols	SKBPC 3508	SKBPC 3510	SKBPC 3512	SKBPC 3514	SKBPC 3516	SKBPC 3518	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	800	1000	1200	1400	1600	1800	V
Maximum RMS voltage	$V_{RMS}$	560	700	840	980	1120	1400	V
Maximum DC Blocking Voltage	$V_{DC}$	800	1000	1200	1400	1600	1800	V
Maximum Average Forward Rectified Current ,50Hz Sine wave resistance load $T_c=85^{\circ}C$	$I_{(AV)}$	35						A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	400						A
Maximum Forward Voltage at 17.5A DC and 25°C	$V_F$	1.1						V
Maximum Reverse Current at $T_A=25^{\circ}C$ $T_A=125^{\circ}C$	$I_R$	5 500						$\mu A$
Rating for fusing $1ms < t < 8.3ms$ $T_j=25^{\circ}C$ , Rating of per diode	$I^2t$	1223						$A^2s$
Openrating junction Temperature	$T_j$	-55~+150						$^{\circ}C$
Storage Temperature	$T_{STG}$	-55 ~ +150						$^{\circ}C$
Dielectric strength terminals to case AC 1 minute	$V_{dis}$	2.5						KV
Junction to ambient thermal resistance, without heatsink	$R_{\theta JA}$	18						$^{\circ}C/W$
Junction to case thermal resistance, with heatsink	$R_{\theta JC}$	1.2						$^{\circ}C/W$

**Characteristic Curve**

FIG1. Derating Curve For Output Rectified Current

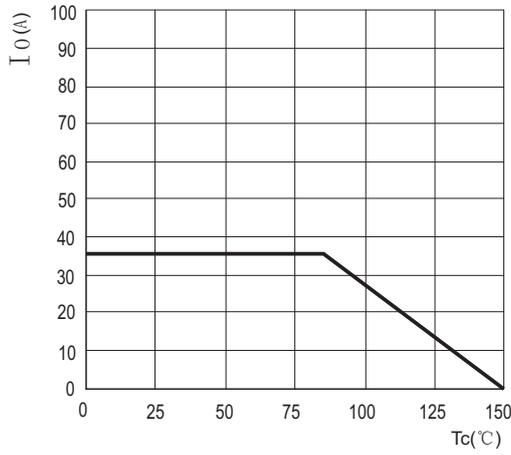


FIG2. Maximum NonRepetitive Peak Forward Surge Current Per Bridge Element

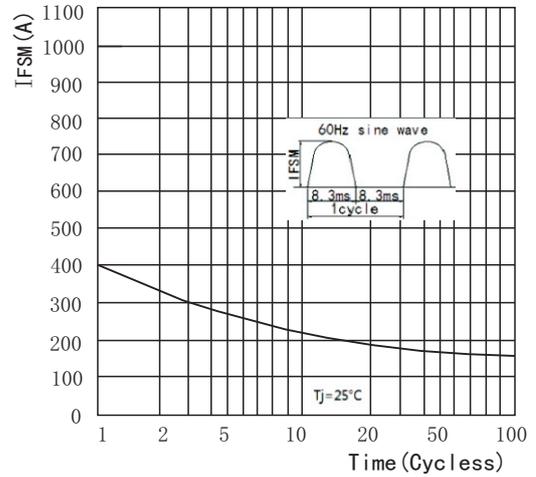


FIG3. Typical Reverse Characteristics Per Bridge Element

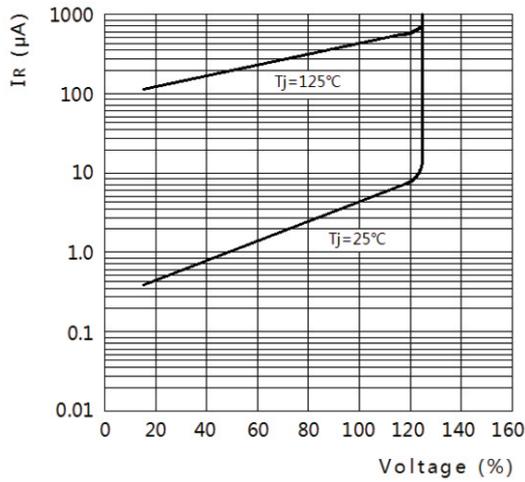
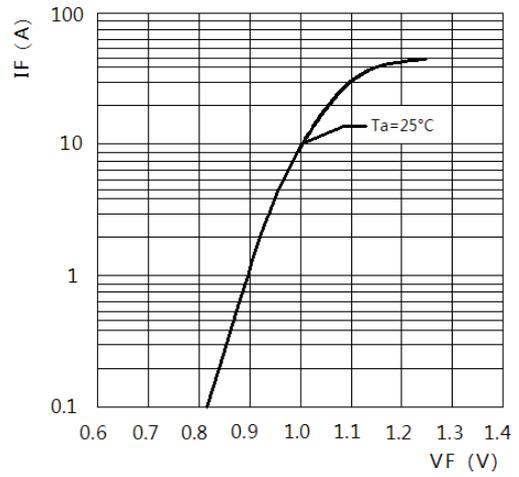
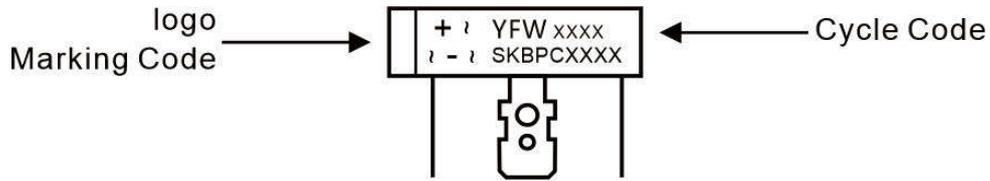


FIG4. Typical Forward Characteristics Per Bridge Element



**Marking Diagram**



**Ordering information**

Package	Packing Description	Packing Quantity
SKBPC	bulk	50PCS/Box 500PCS/Carton

**Package Dimensions**

**SKBPC**

The diagram shows the package dimensions for SKBPC. The dimensions are labeled A through H. The dimensions are as follows:

Dim.	Millimeter(mm)		Dimensions inInch	
	Min.	Max.	Min.	Max.
A	23.1	24.1	0.91	0.95
B	23.1	24.1	0.91	0.95
C	28.2	28.8	1.11	1.13
D	16	17	0.63	0.67
E	22	24	0.87	0.94
F	9.4	10	0.37	0.39
G	6.2	6.4	0.24	0.25
H	0.75	0.85	0.03	0.03

## Disclaimer

The information presented in this document is for reference only. GuangDong Youfeng Microelectronics Co.,Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise. The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices),YFW or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale. This publication supersedes & replaces all information previously supplied. For additional information, please visit our website <https://www.yfwdiode.com>, or consult YFW sales office for further assistance.