

**High Current Glass Passivated Molding Three-Phase Bridge Rectifier**

**Voltage - 800 to 1800 V**  
**Forward Current –35 A**



**FEATURES**

- ◆High current capability
- ◆Low forward voltage drop
- ◆Glass Passivated ChipJunction
- ◆Low power loss, high efficiency
- ◆LeadfreeincomplywithEUroHS2011/65/EUdirectives

**MECHANICAL DATA**

- ◆Case:SKBPC,
- ◆Terminals: Solderable per MIL-STD-202, Method208
- ◆Approx. Weight: SKBPC16g



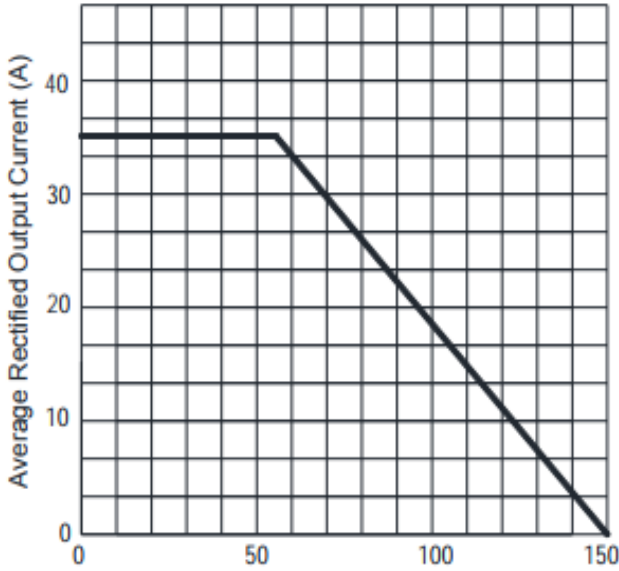
**Maximum Ratings and Electrical characteristics**

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	SKBPC 3508	SKBPC 3510	SKBPC 3512	SKBPC 3516	SKBPC 3518	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	800	1000	1200	1600	1800	V
Maximum RMS voltage	$V_{RMS}$	560	700	840	1120	1400	V
Maximum DC Blocking Voltage	$V_{DC}$	800	1000	1200	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	$I_{FSM}$	450					A
Maximum Forward Voltageat 17.5A DC and 25°C	$V_F$	1.05					V
Maximum Reverse Currentat $T_A=25^{\circ}C$	$I_R$	10					$\mu A$
Typical Thermal Resistance per Element	$R_{\theta JC}$	1					$^{\circ}C/W$
I2t Rating for Fusing	$I^2t$	1030					A2sec
Storage Temperature	$T_{stg}$	-55 ~ +150					$^{\circ}C$
Openrating junction Temperature	$T_j$	150					$^{\circ}C$

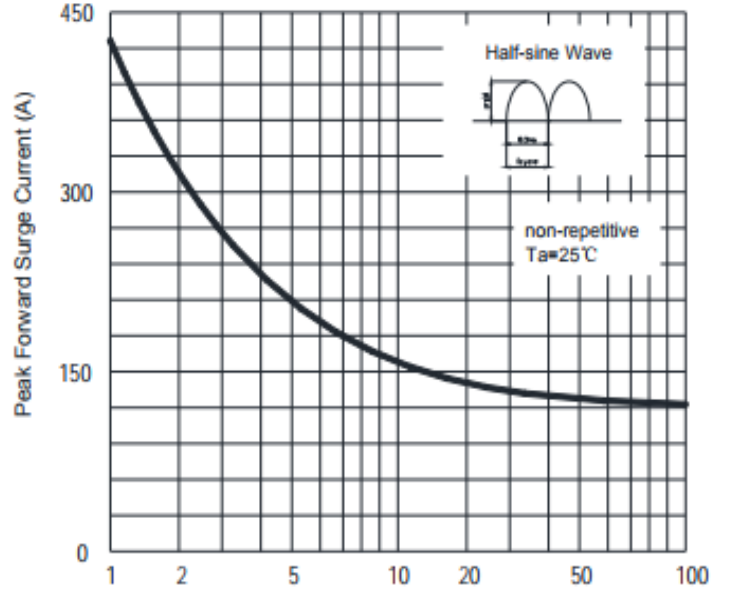
■ Characteristics (Typical)

FIG1:Io-Tc Curve



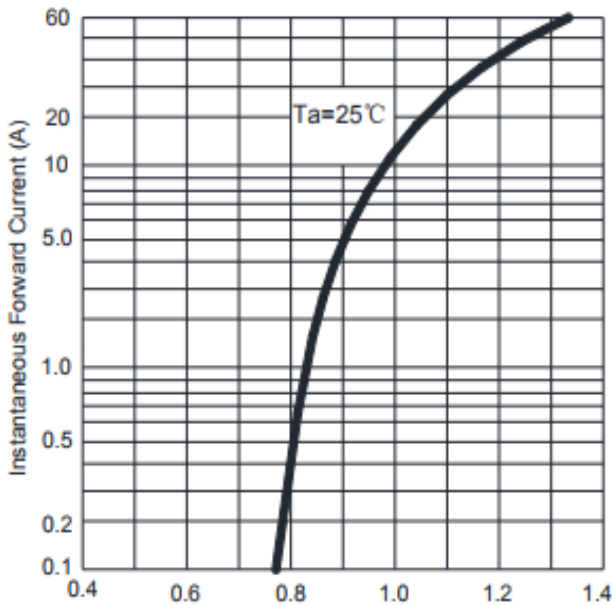
Case Temperature (°C)

FIG2: Surge Forward Current Capability



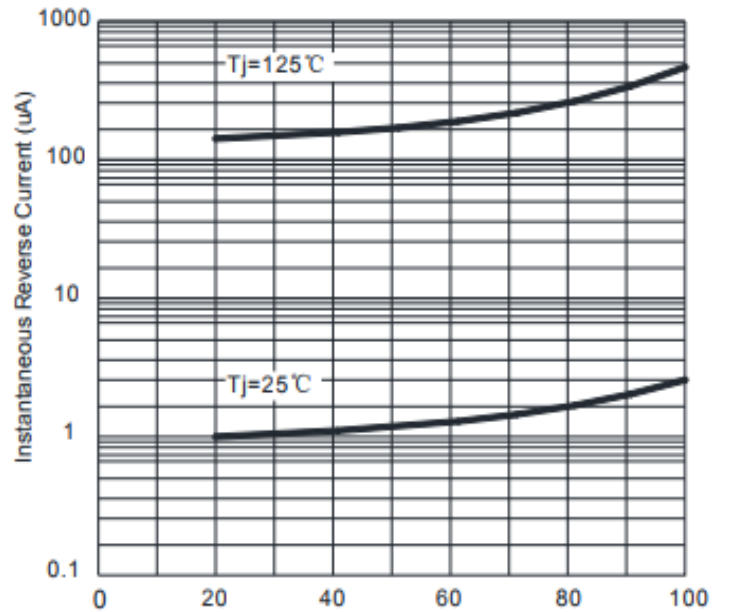
Number of Cycles

FIG3: Instantaneous Forward Voltage



Instantaneous Forward Voltage (V)

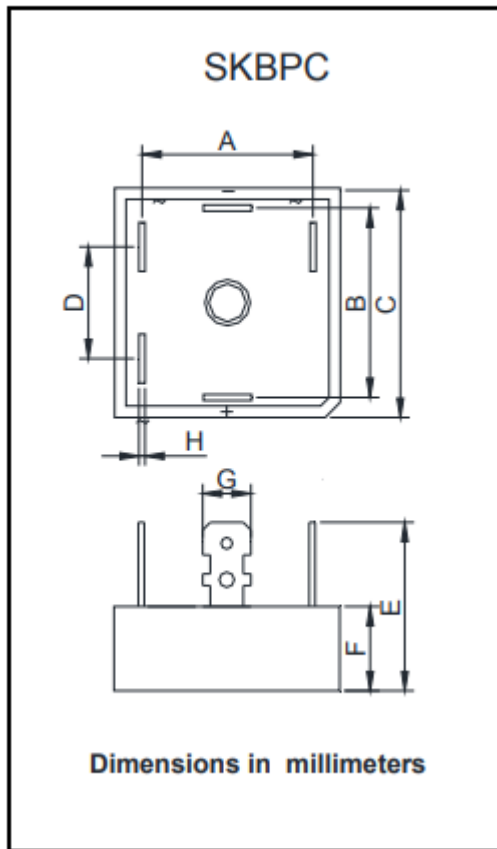
FIG4: Typical Reverse Characteristics



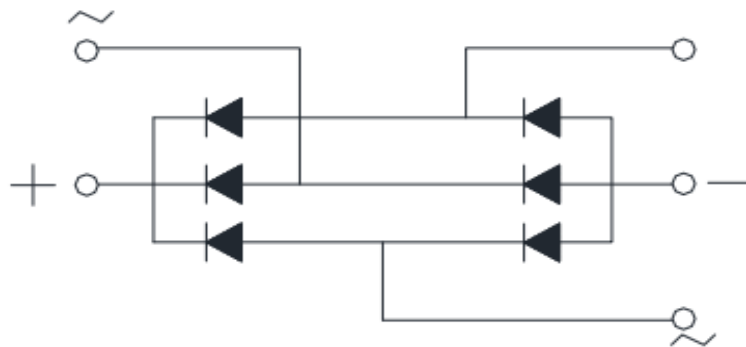
Percent Rated Peak Reverse Voltage(%)

Package Outline

SKBPC



SKBPC		
Dim	Min	Max
A	23.1	24.1
B	23.1	24.1
C	28.2	28.8
D	16	17
E	/	25
F	10.8	11.2
G	6.2	6.4
H	0.75	0.85



Summary of Packing Options

Package	Package Description	Packing Quantity	Industry Standard
SKBPC	BOX	50	EIA-481-1