

## Three Phase Bridge Rectifiers

### Features:

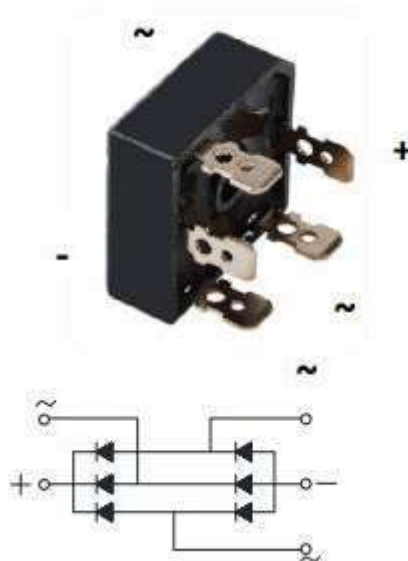
- UL recognition, file #E230084
- Glass passivated chip
- High surge current capability
- Low thermal resistance
- Solder dip 275 °C max. 7 s, per JESD 22-B106

### Applications:

General purpose use in AC/DC bridge full wave rectification for power supply, home appliances, office equipment, industrial automation applications.

### Mechanical Data:

- **Package:** SKBPC  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B10



### Maximum Ratings (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SKBPC3504	SKBPC3506	SKBPC3508	SKBPC3510	SKBPC3512	SKBPC3514	SKBPC3516
Device marking code			SKBPC3504	SKBPC3506	SKBPC3508	SKBPC3510	SKBPC3512	SKBPC3514	SKBPC3516
Repetitive Peak Reverse Voltage	VRRM	V	400	600	800	1000	1200	1400	1600
Average Rectified Output Current @60Hz sine wave, R-load, With heatsink T <sub>c</sub> =55°C	I <sub>O</sub>	A	35						
Surge(Non-repetitive)Forward Current @60HZ Half- sine Wave, 1 cycle, T <sub>a</sub> =25°C	IFSM	A	425						
Current Squared Time @1ms≤t<8.3ms T <sub>j</sub> =25°C, Rating of per diode	I <sup>2</sup> t	A <sup>2</sup> S	750						
Storage Temperature	T <sub>stg</sub>	°C	-55 ~+150						
Junction Temperature	T <sub>j</sub>	°C	-55 ~+150						
Dielectric Strength, Terminals to case, AC 1 minute	V <sub>dis</sub>	KV	2.5						
Mounting Torque	TOR	kg·cm	10						

### Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SKBPC3504	SKBPC3506	SKBPC3508	SKBPC3510	SKBPC3512	SKBPC3514	SKBPC3516
Maximum instantaneous forward voltage drop per diode	V <sub>FM</sub>	V	I <sub>FM</sub> =17.5A	1.2						
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>RRM</sub>	μA	V <sub>RM</sub> =V <sub>RRM</sub>	10						

### Thermal Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SKBPC3504	SKBPC3506	SKBPC3508	SKBPC3510	SKBPC3512	SKBPC3514	SKBPC3516
Thermal Resistance Between junction and case, With heatsink	R <sub>θ J-C</sub>	°C/W	1.35						

■ **Ordering Information (Example)**

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SKBPC3504~SKBPC3516	A1	Approximate 19	50	50	500	Paper Box

■ **Characteristics (Typical)**

FIG1:Io-Tc Curve

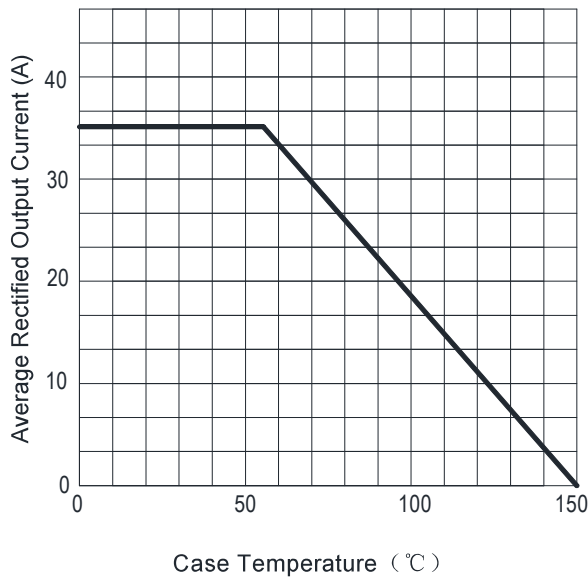


FIG2:Surge Forward Current Capability

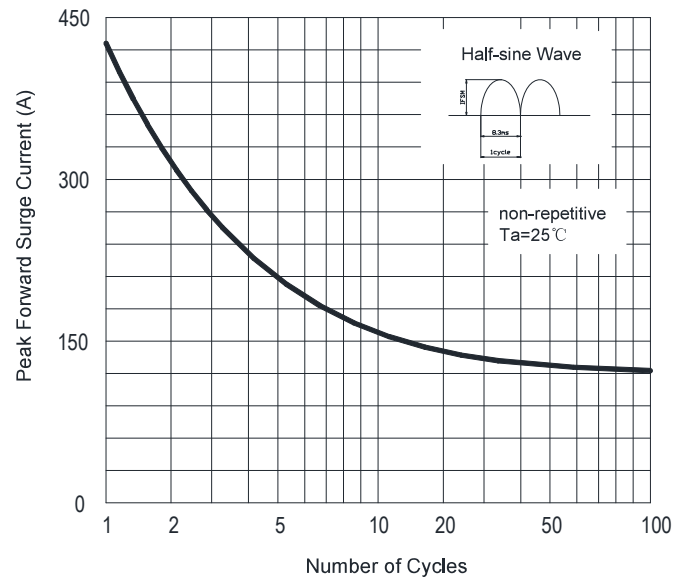


FIG3:Instantaneous Forward Voltage

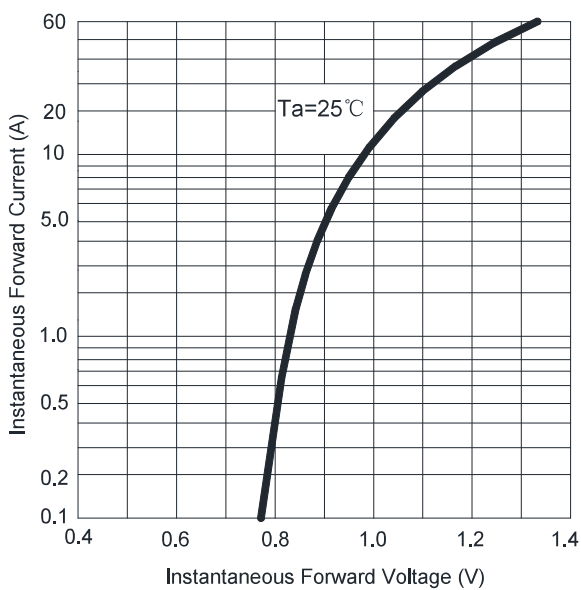
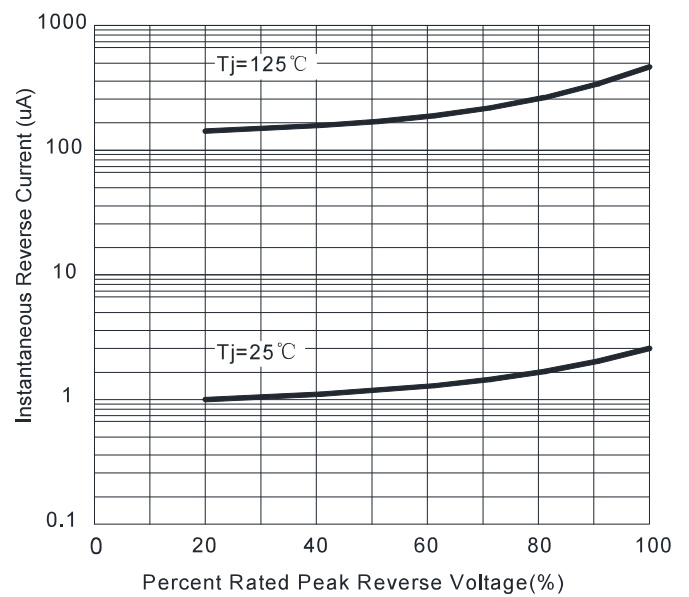
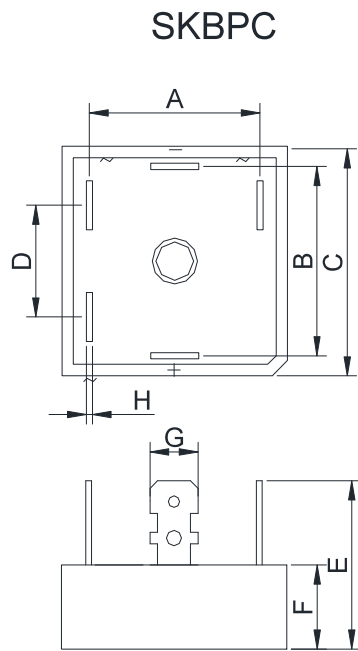


FIG4:Typical Reverse Characteristics



■ **Outline Dimensions**



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

**Dimensions in millimeters**