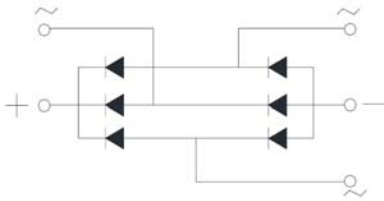
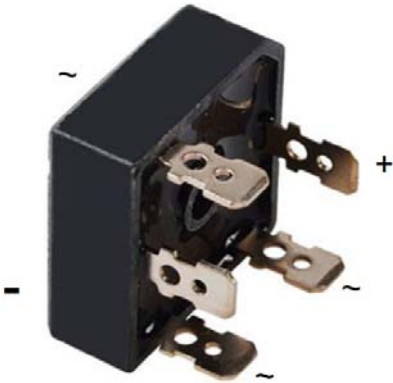


## Three Phase Bridge Rectifiers



### Features

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

### Typical Applications

General purpose use in AC/DC bridge full wave rectification for Server、Frequency converter、Industrial power supply.

### 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-B102
- **Polarity:** As marked on body

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

PARAMETER	SYMBOL	UNIT	SKBPC5004	SKBPC5006	SKBPC5008	SKBPC5010	SKBPC5012	SKBPC5014	SKBPC5016
Device marking code			SKBPC5004	SKBPC5006	SKBPC5008	SKBPC5010	SKBPC5012	SKBPC5014	SKBPC5016
Maximum Repetitive Peak Reverse Voltage	VRRM	V	400	600	800	1000	1200	1400	1600
Maximum RMS Voltage	VRMS	V	280	420	560	700	840	980	1120
Maximum DC blocking Voltage	VDC	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	50					
Forward Surge Current (Non-repetitive) @8.3ms Half-sine wave, 1 cycle, T <sub>j</sub> =25°C				500					
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	1038						
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 @Recommend torque: 5kg·cm	Tor	kg·cm	8						



# SKBPC5004 THRU SKBPC5016

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SKBPC5004	SKBPC5006	SKBPC5008	SKBPC5010	SKBPC5012	SKBPC5014	SKBPC5016
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	I <sub>F</sub> M=25A	1.15						
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>R</sub>	μA	T <sub>j</sub> =25°C	5						
			T <sub>j</sub> =125°C	500						
Typical junction capacitance	C <sub>j</sub>	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	240					175	

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

PARAMETER	SYMBOL	UNIT	SKBPC5004	SKBPC5006	SKBPC5008	SKBPC5010	SKBPC5012	SKBPC5014	SKBPC5016
Typical Thermal Resistance Between junction and case, With heatsink	R <sub>θJ-C</sub>	°C/W	0.9						

Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

## ■ Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SKBPC5004 ~ SKBPC5016	A1	Approximate 19	50	50	500	Paper Box

## ■ Characteristics (Typical)

FIG1: I<sub>o</sub>-T<sub>c</sub> Curve

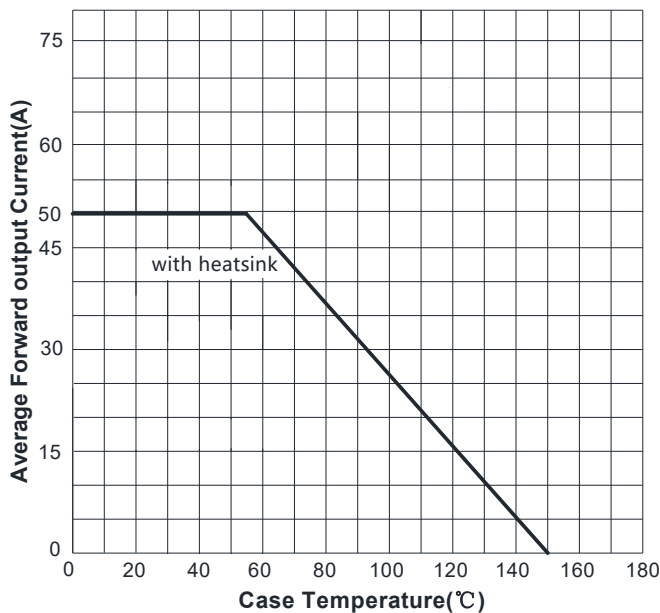
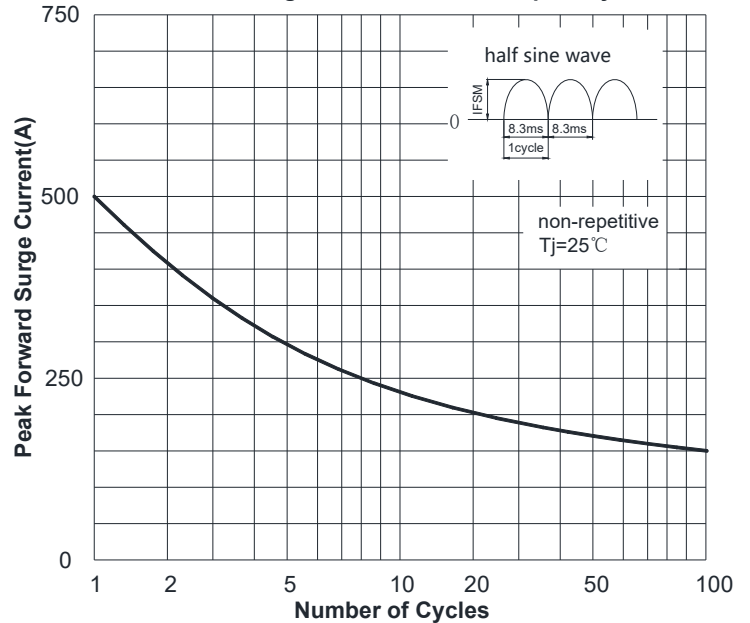


FIG2: Surge Forward Current Capability





# SKBPC5004 THRU SKBPC5016

FIG3: Typical Forward Voltage

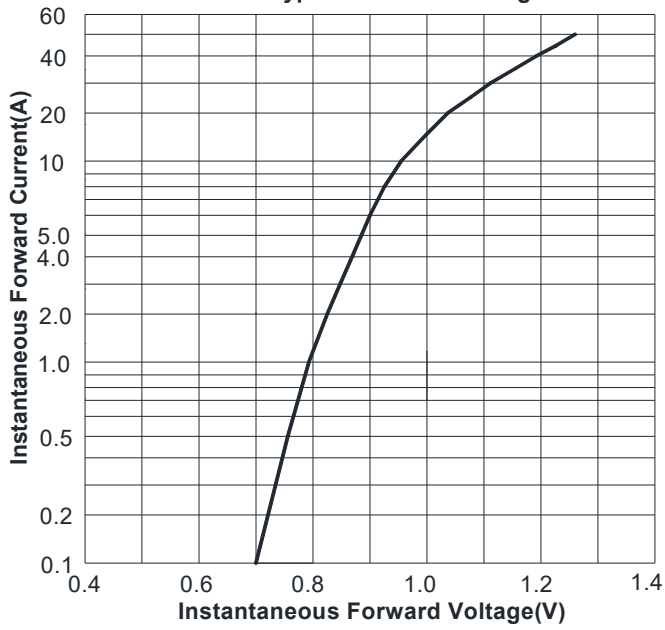
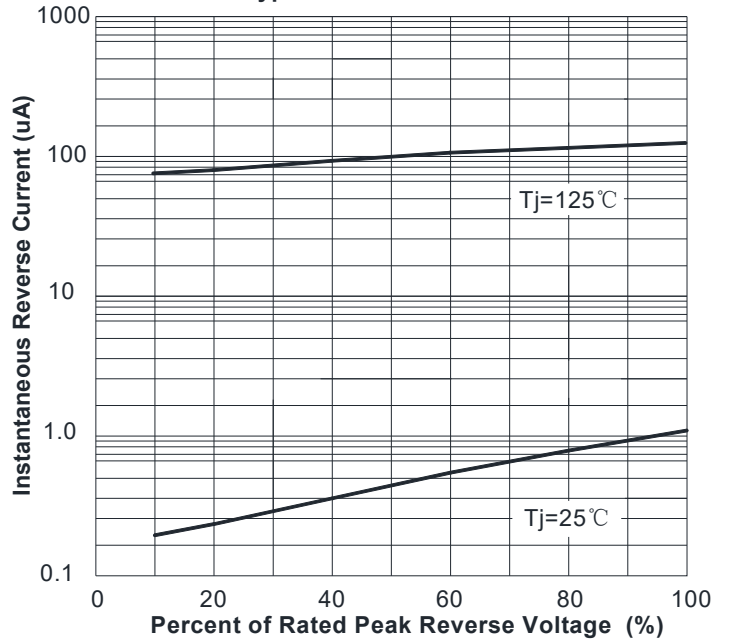
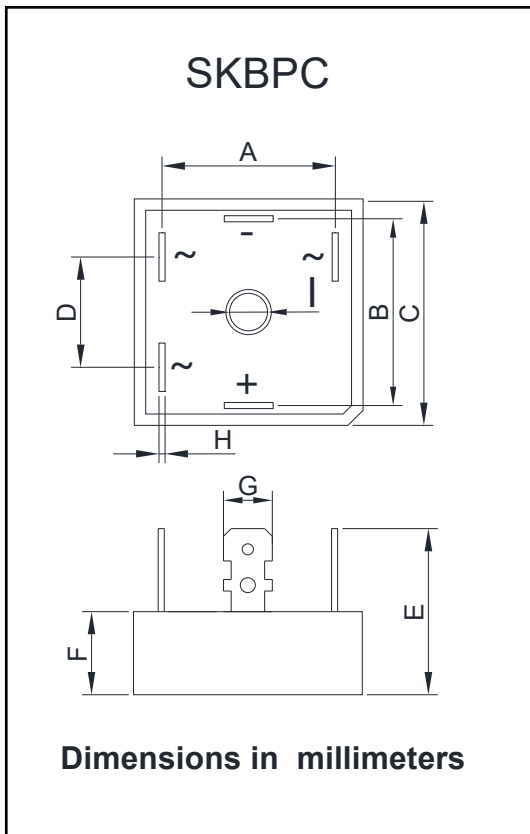


FIG4: Typical Reverse Characteristics



## ■ Outline Dimensions



SKBPC		
Dim	Min	Max
A	23.1	24.1
B	23.1	24.1
C	28.2	28.8
D	16.0	17.0
E	/	25
F	10.8	11.2
G	6.2	6.4
H	0.75	0.85
I	4.5	5.5



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