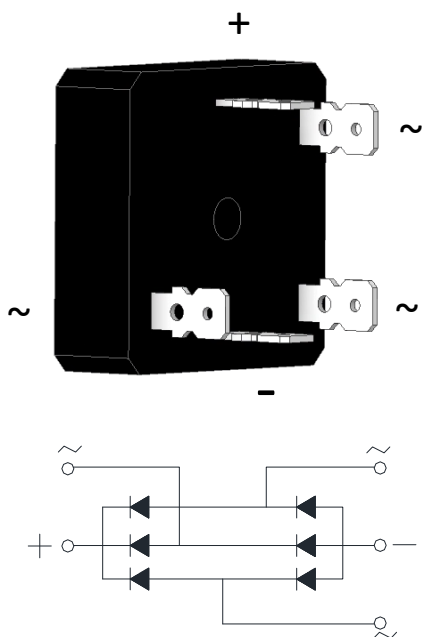


Three Phase Bridge Rectifiers



Features

- UL recognition, file #E230084
- Glass passivated chip junction
- Thin single in-line package
- 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:** SKBPC75
Molding compound meets UL 94 V-0 flammability rating
- **Terminals:** Nickel plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked on body

■Maximum Ratings (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SKBPC7506	SKBCP7508	SKBPC7510	SKBPC7512	SKBPC7514	SKBPC7516
Device marking code			SKBPC7506	SKBCP7508	SKBPC7510	SKBPC7512	SKBPC7514	SKBPC7516
Maximum Repetitive Peak Reverse Voltage	VRRM	V	600	800	1000	1200	1400	1600
Maximum RMS Voltage	VRMS	V	420	560	700	840	980	1120
Maximum DC blocking Voltage	VDC	V	600	800	1000	1200	1400	1600
Average rectified output current @60Hz sine wave, R-load	With heatsink T _c =85°C	IO	A	75				
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, T _j =25°C	IFSM	A	800					
Current squared time @1ms≤t≤8.3ms T _j =25°C, Rating of per diode	I ² t	A ² s	2656					
Storage temperature	T _{stg}	°C	-55 ~ +150					
Junction temperature	T _j	°C	-55 ~ +150					
Dielectric strength @ Terminals to case, AC 1 minute	V _{dis}	KV	2.5					
Mounting torque @Recommend torque: 5kg·cm	Tor	kg·cm	8					

SKBPC7506 THRU SKBPC7516

■Electrical Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SKBPC7506	SKBCP7508	SKBPC7510	SKBPC7512	SKBPC7514	SKBPC7516
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =37.5A	1.1				1.2	
Maximum DC reverse current at rated DC blocking voltage per diode	I _R	μA	T _j =25°C	5					
			T _j =125°C	500					
Typical junction capacitance	C _j	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V D.C	315					

■Thermal Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	SKBPC7506	SKBCP7508	SKBPC7510	SKBPC7512	SKBPC7514	SKBPC7516
Thermal Resistance	Between junction and ambient, Without heatsink	R _{θJ-A}	°C/W	16.0					
	Between junction and case, With heatsink	R _{θJ-C}		0.75					

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
SKBPC7506 – SKBPC7516	A1	Approximate 32.5	50	50	500	Paper Box

■ Characteristics (Typical)

FIG1:I_o-T_c Curve

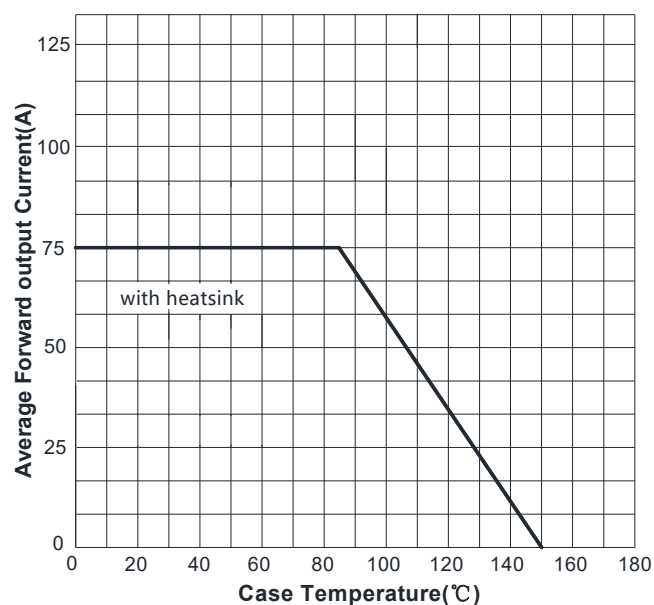
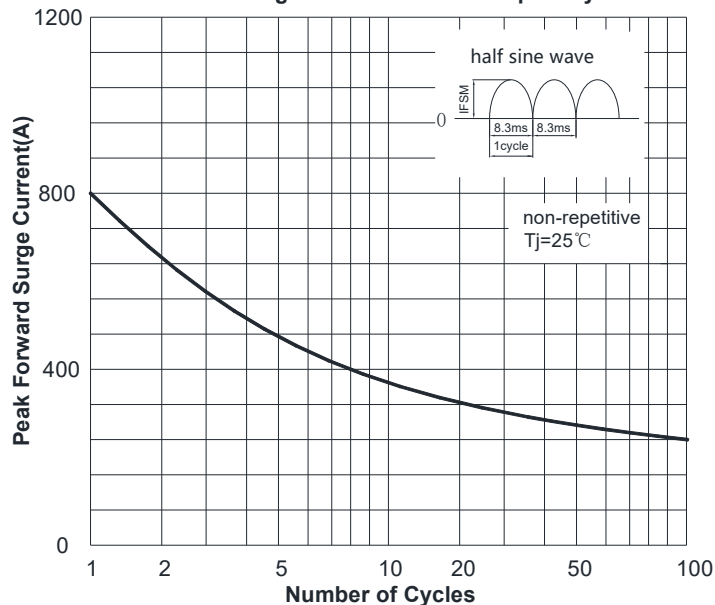
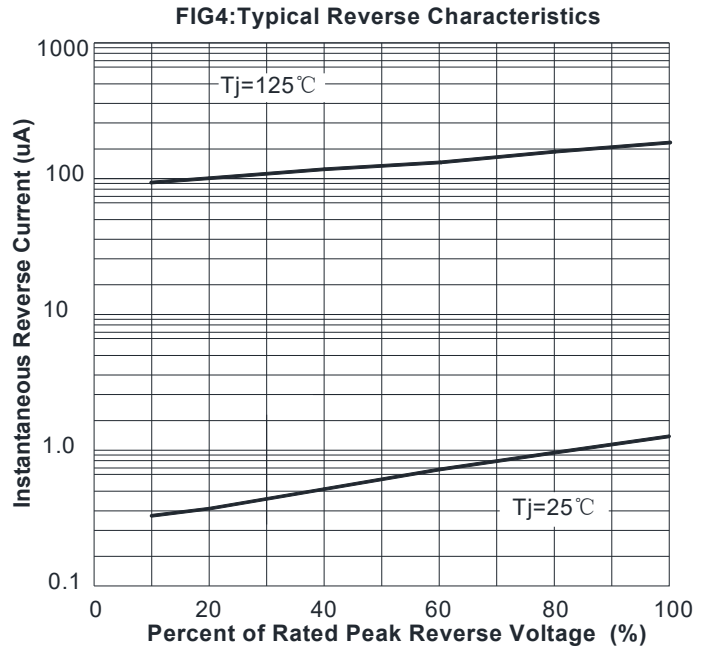
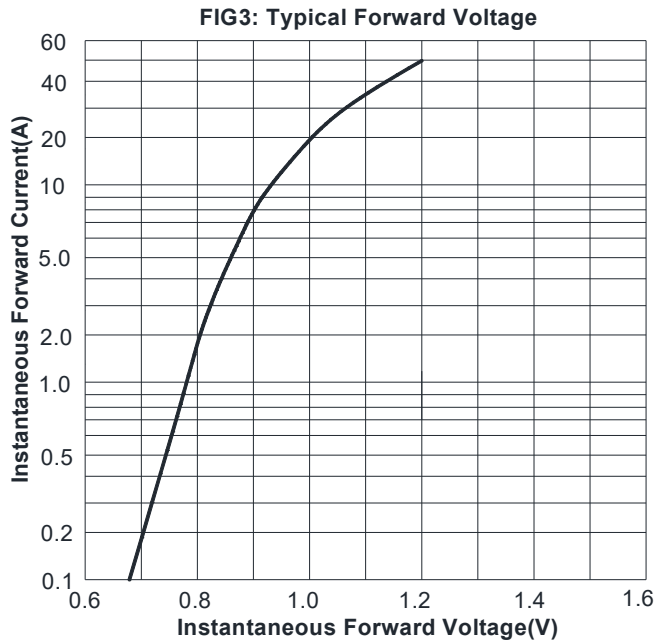
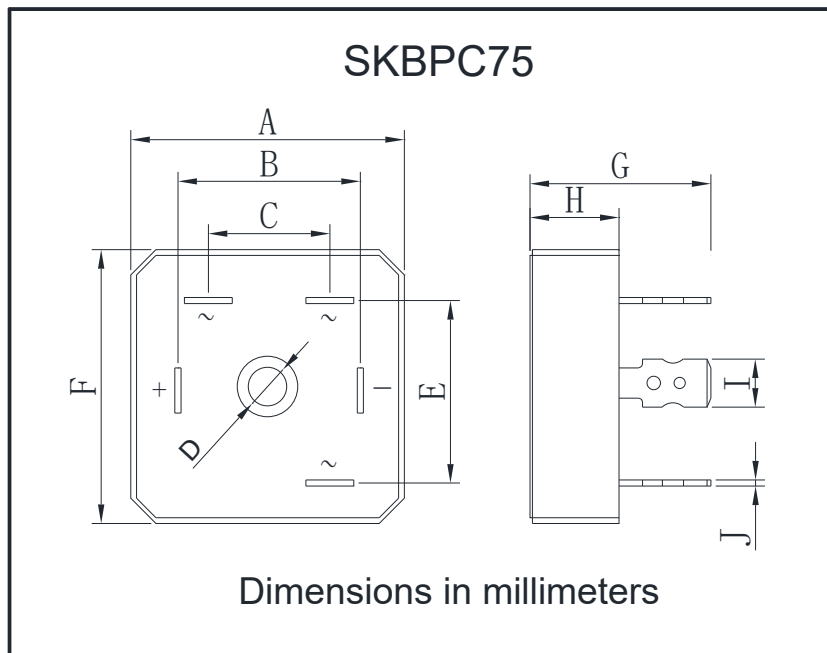


FIG2: Surge Forward Current Capability





■ Outline Dimensions



SKBPC75		
Dim	Min	Max
A	35.5	36.5
B	23.5	24.5
C	15.5	16.5
D	4.5	5.5
E	23.5	24.5
F	35.5	36.5
G	22.5	24.5
H	11.2	12.2
I	6.1	6.5
J	0.6	1.0

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