

Three Phase Bridge Rectifiers

Features

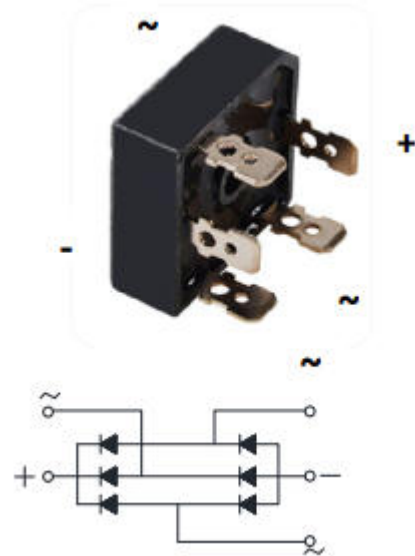
- UL recognition, file #E230084
- Glass passivated chip
- High surge current capability
- Low thermal resistance
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical 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 ($T_a=25^{\circ}\text{C}$ 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 $T_c=55^{\circ}\text{C}$	I_O	A	35						
Surge(Non-repetitive)Forward Current @60HZ Half- sine Wave, 1 cycle, $T_a=25^{\circ}\text{C}$	IFSM	A	425						
Current Squared Time @1ms $\leq t < 8.3\text{ms}$ $T_j=25^{\circ}\text{C}$, Rating of per diode	I^2t	A^2S	750						
Storage Temperature	T_{stg}	$^{\circ}\text{C}$	-55 ~+150						
Junction Temperature	T_j	$^{\circ}\text{C}$	-55 ~+150						
Dielectric Strength, Terminals to case, AC 1 minute	V_{dis}	KV	2.5						
Mounting Torque	TOR	kg·cm	10						

■ Electrical Characteristics ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SKBPC3506	SKBPC3508	SKBPC3508	SKBPC3510	SKBPC3512	SKBPC3514	SKBPC3516
Maximum instantaneous forward voltage drop per diode	VFM	V	IFM=17.5A	1.2						
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM	μA	VRM=VRRM	10						

■ Thermal Characteristics ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SKBPC3506	SKBPC3508	SKBPC3508	SKBPC3510	SKBPC3512	SKBPC3514	SKBPC3516
Thermal Resistance Between junction and case, With heatsink	$R_{\theta JC}$	$^{\circ}\text{C/W}$	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

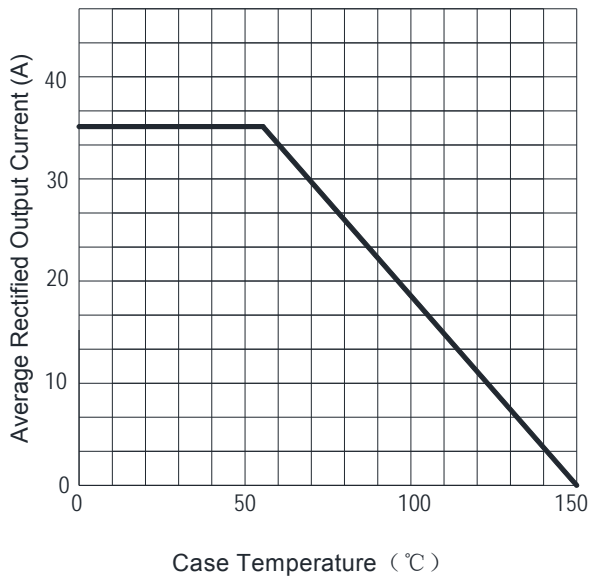


FIG2:Surge Forward Current Capability

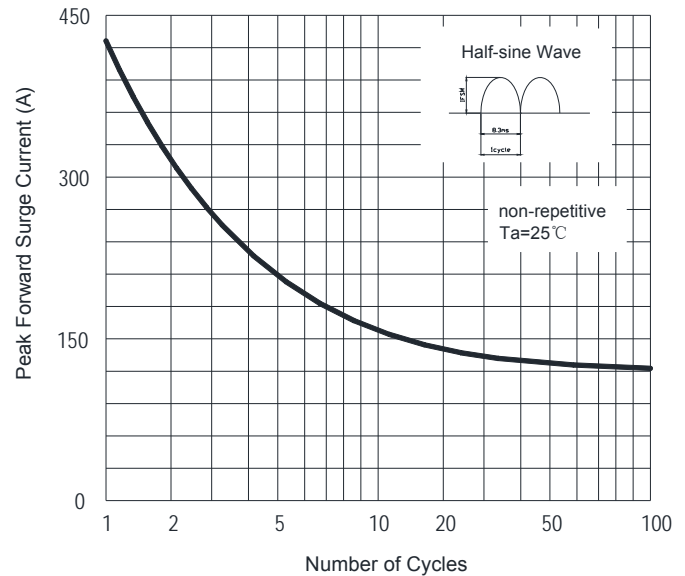


FIG3:Instantaneous Forward Voltage

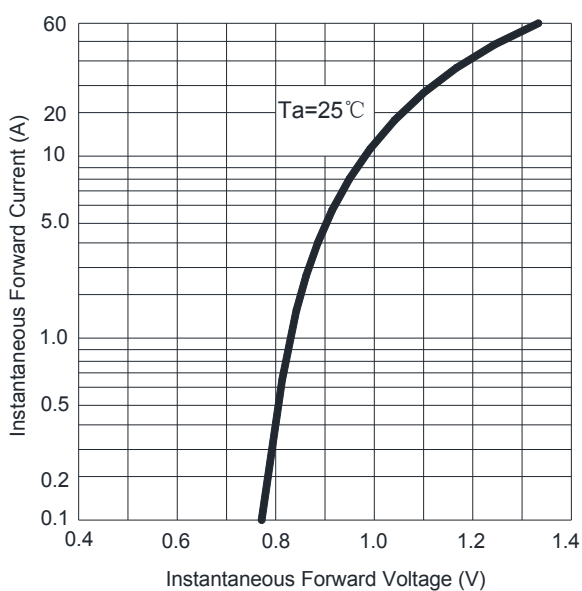
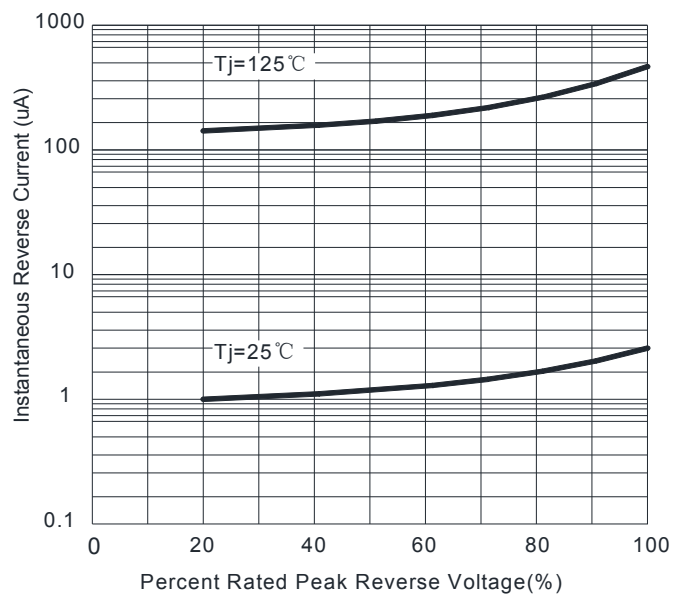
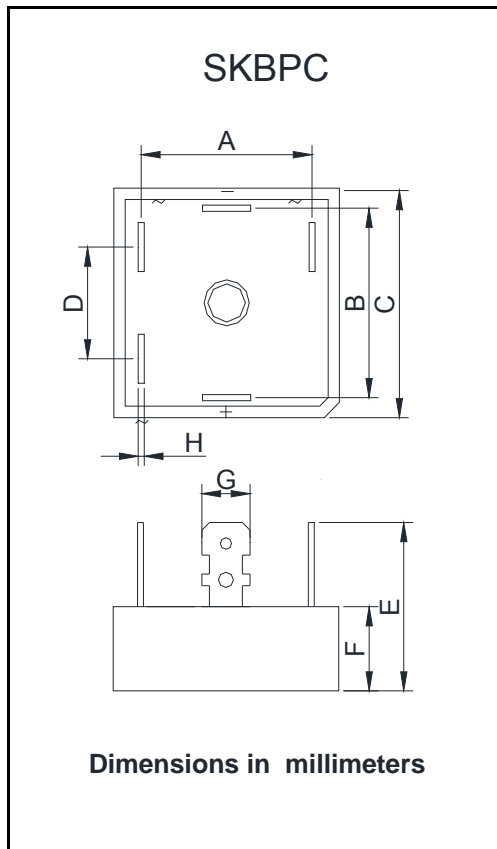


FIG4:Typical Reverse Characteristics



■ 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

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