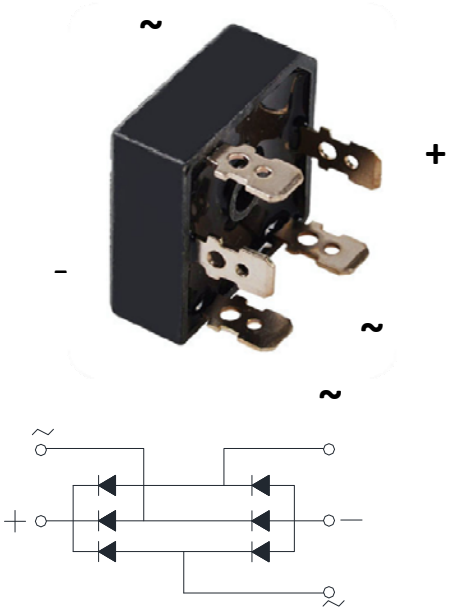
Three Phase Bridge Rectifiers



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℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	SKBPC5004	SKBPC5006	SKBPC5008	SKBPC5010	SKBPC5012	SKBPC5014	SKBPC5016
Device marking code			SKBPC5004	SKBPC5006	SKBPC5008	SKBPC5010	SKBPC5012	SKBPC5014	SKBPC5016
Repetitive Peak Reverse Voltage	V_{RRM}	V	400	600	800	1000	1200	1400	1600
Average Rectified Output Current @60Hz sine wave, R-load, With heatsink Tc=55℃	I_O	A	50						
Surge(Non-repetitive)Forward Current @60Hz Half- sine Wave, 1 cycle, T_a=25℃	I_{FSM}	A	500						
Current Squared Time @1ms≤t<8.3ms Tj=25℃, Rating of per diode	I^2t	A^2S	1040						
Storage Temperature	Tstg	℃	-55 ~+150						
Junction Temperature	Tj	℃	-55~+150						
Dielectric Strength, Terminals to case，AC 1 minute	Vdis	KV	2.5						
Mounting Torque	TOR	g·cm	10						

■Electrical Characteristics（T_a=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SKBPC5004~SKBPC5016
Maximum instantaneous forward voltage drop per diode	V_{FM}	V	I_{FM}=25A	1.2
Maximum DC reverse current at rated DC blocking voltage per diode	I_{RRM}	μA	V_{RM}=V_{RRM}	10

■Thermal Characteristics （T_a=25℃ Unless otherwise specified）

PARAMETER		SYMBOL	UNIT	SKBPC5004~SKBPC5016
Thermal Resistance	Between junction and case, With heatsink	$R_{\theta J-C}$	℃/W	0.9

■Ordering Information (Example)

PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM 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:Io-Tc Curve

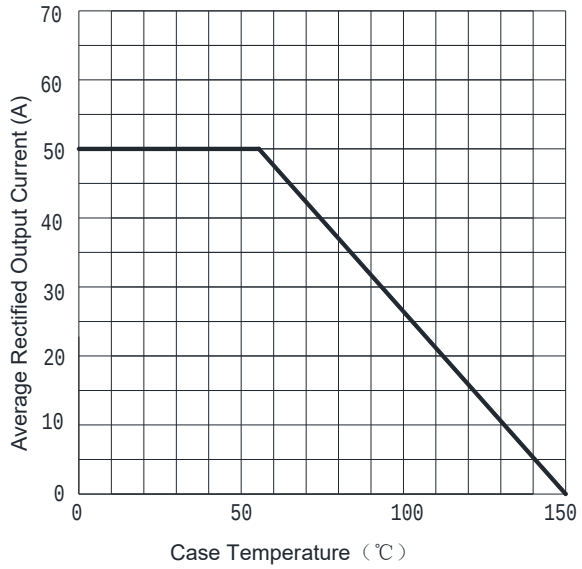


FIG2:Surge Forward Current Capability

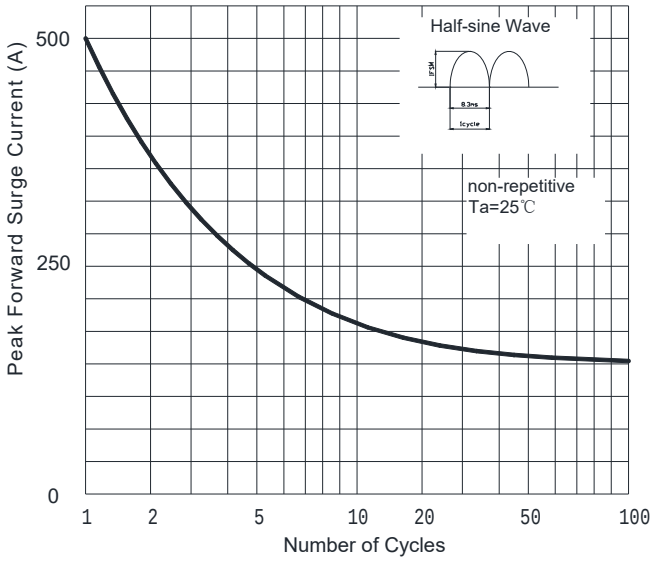


FIG3:Instantaneous Forward Voltage

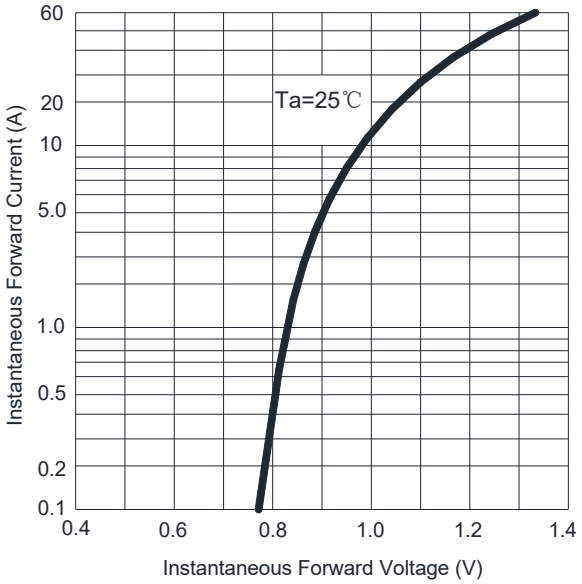
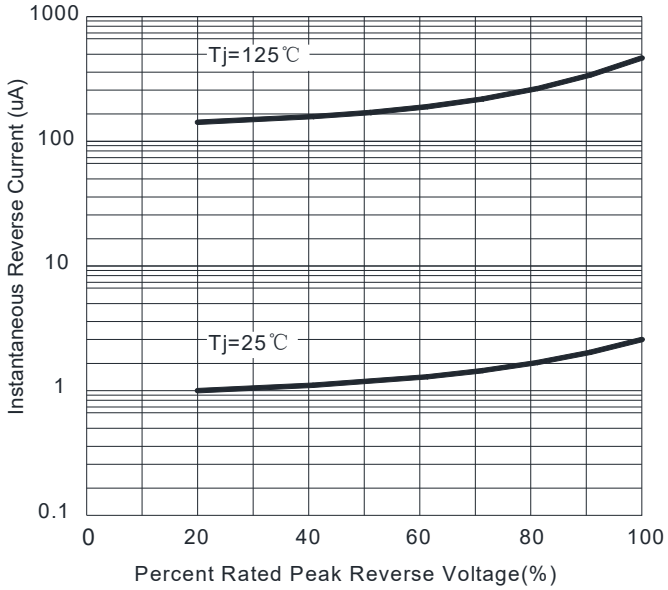
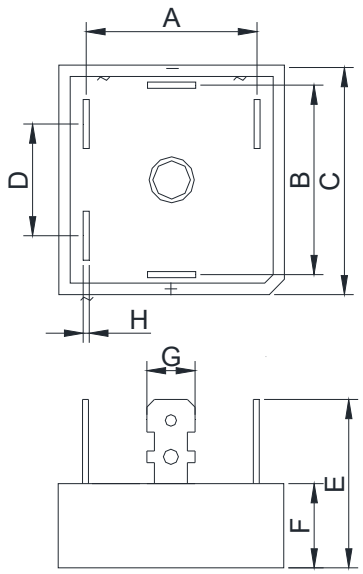


FIG4:Typical Reverse Characteristics



■ Outline Dimensions

SKBPC



Dimensions in millimeters

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

Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website http:// www.21yangjie.com , or consult your nearest Yangjie's sales office for further assistance.