

Features

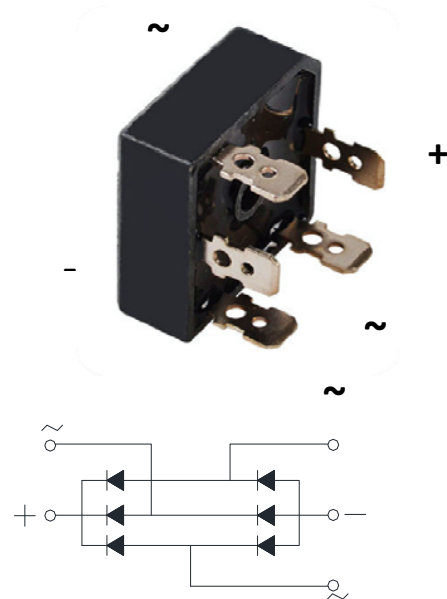
- UL recognition, file #E476985
- Glass passivated chip
- High surge current capability
- Low thermal resistance
- Solder dip 275 °C max. 7 s, per JESD 22-B106

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	SKBPC2504	SKBPC2506	SKBPC2508	SKBPC2510	SKBPC2512	SKBPC2514	SKBPC2516
Device marking code			SKBPC2504	SKBPC2506	SKBPC2508	SKBPC2510	SKBPC2512	SKBPC2514	SKBPC2516
Repetitive Peak Reverse Voltage	VRRM	V	400	600	800	1000	1200	1400	1600
Average Rectified Output Current @60Hz sine wave, R-load, With heatsink $T_c=55^\circ\text{C}$	IO	A	25						
Surge(Non-repetitive)Forward Current @60HZ Half- sine Wave, 1 cycle, $T_a=25^\circ\text{C}$	IFSM	A	300						
Current Squared Time @1ms≤t<8.3ms $T_j=25^\circ\text{C}$, Rating of per diode	I ² t	A ² S	373.5						
Storage Temperature	Tstg	°C	-55~+150						
Junction Temperature	Tj	°C	-55 ~+150						
Dielectric Strength, Terminals to case, AC 1 minute	Vdis	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	SKBPC25 06	SKBPC25 08	SKBPC25 08	SKBPC25 10	SKBPC25 12	SKBPC25 14	SKBPC25 16
Maximum instantaneous forward voltage drop per diode	VFM	V	IFM=12.5A	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	SKBPC2506	SKBPC2508	SKBPC2508	SKBPC2510	SKBPC2512	SKBPC2514	SKBPC2516
Thermal Resistance Between junction and case, With heatsink	Rθ J-C	°C/W	1.9						

■ Characteristics (Typical)

FIG1:Io-Tc Curve

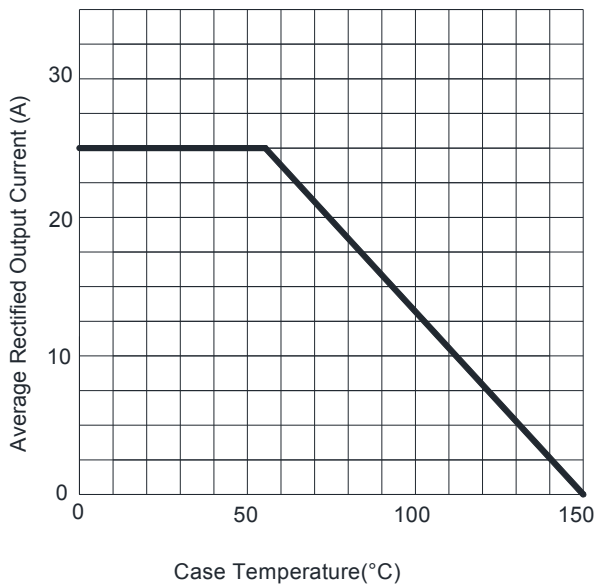


FIG2:Surge Forward Current Capability

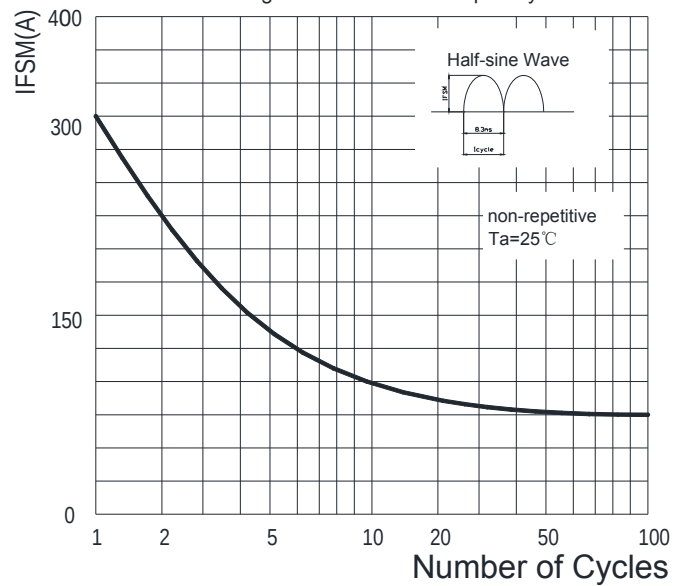


FIG3:Instantaneous Forward Voltage

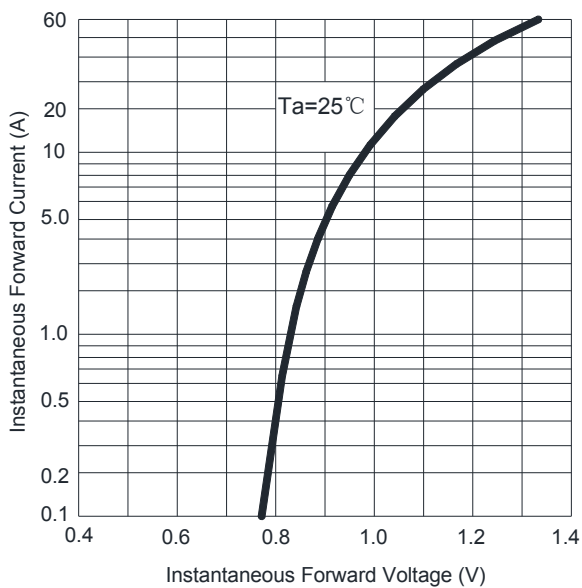
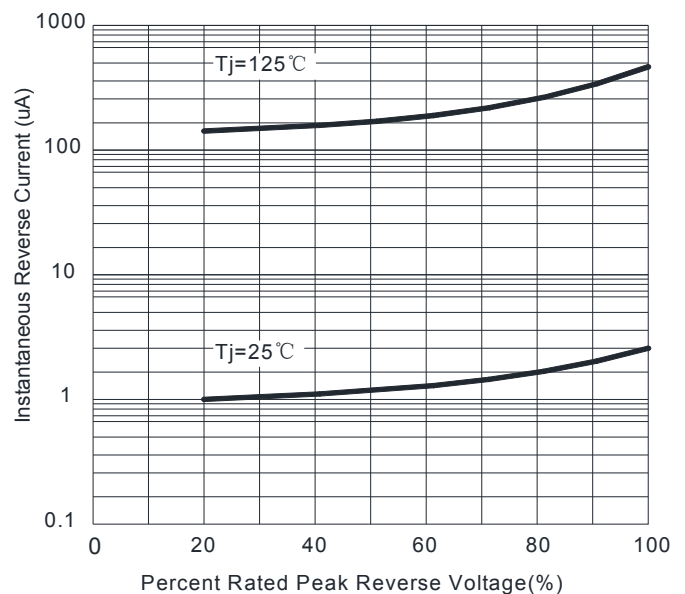
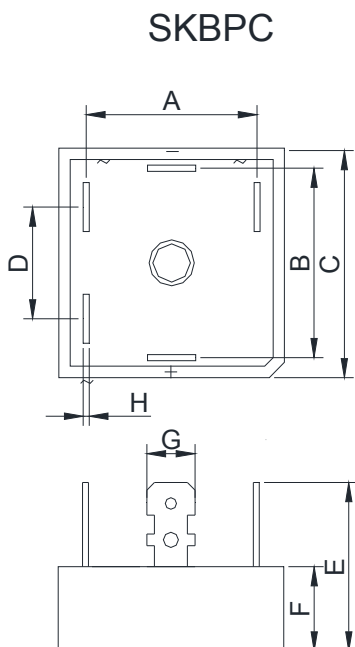


FIG4:Typical Reverse Characteristics



■ 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

■ Ordering Information (Example)

PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SKBPC2504~SKBPC2516	SKBPC	Approximate 19	50	50	500	Paper Box