

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	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	360						
Current Squared Time @ $1\text{ms} \leq t < 8.3\text{ms}$ $T_j=25^{\circ}\text{C}$, Rating of per diode	I ² t	A ² S	540						
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	SKBPC2504~SKBPC2516
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	SKBPC2504~SKBPC2516
Thermal Resistance Between junction and case, With heatsink	RθJ-C	°C/W	1.9

■ **PACKAGING INFORMATION**

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SKBPC2504~SKBPC2516	A1	Approximate 19	50	50	500	Paper Box

■ **CHARACTERISTICS (TYPICAL)**

FIG1:Io-Tc Curve

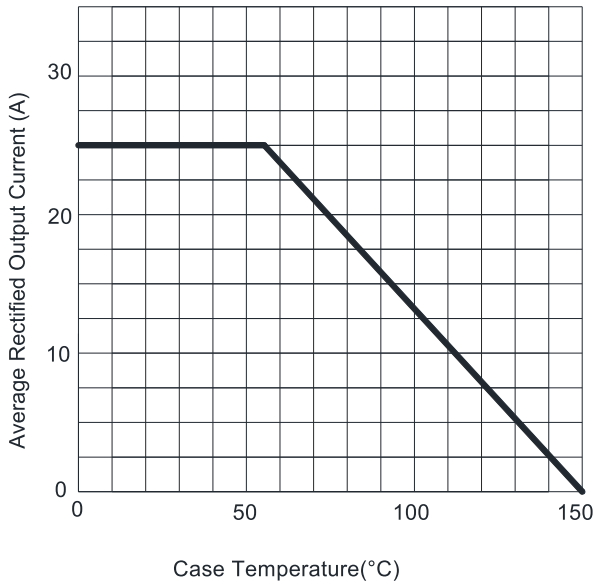


FIG2:Surge Forward Current Capability

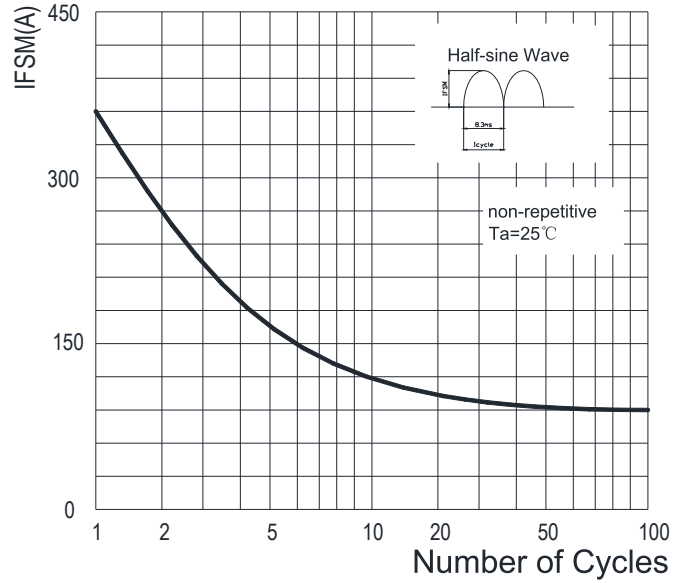


FIG3:Instantaneous Forward Voltage

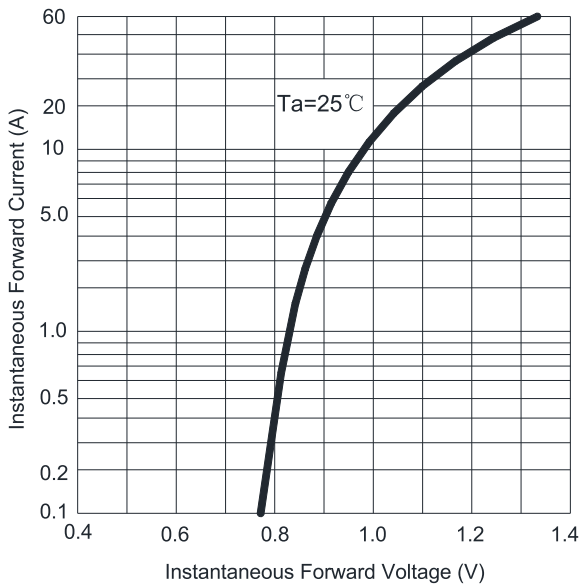
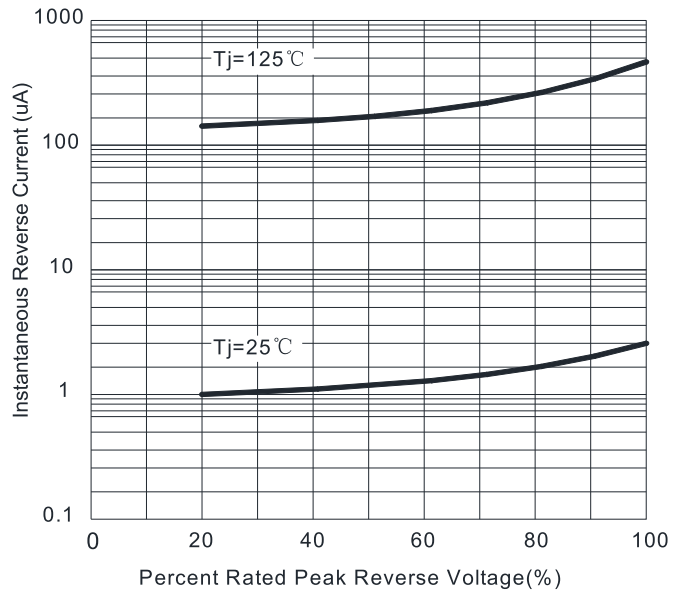
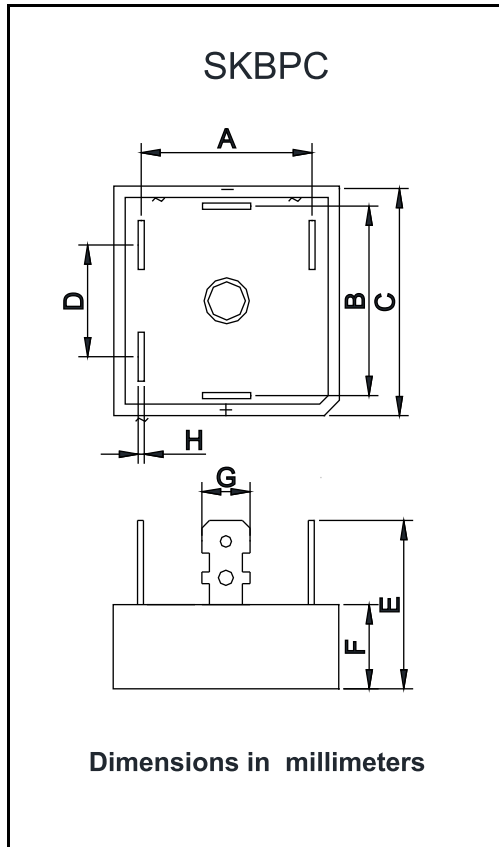


FIG4:Typical Reverse Characteristics



■ **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