



Features

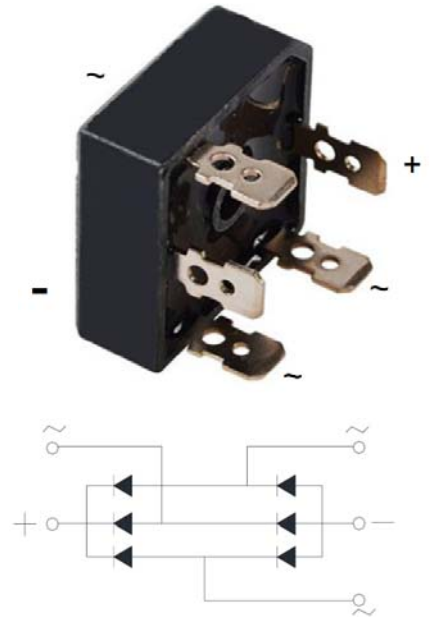
- UL recognition, file #E476985
- Low thermal resistance
- Glass passivated chip junction
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

General purpose use in AC/DC bridge full wave rectification for Server、Frequency converter、Industrial power supply.

Mechanical Data

- **Package:** SKBPC
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked on body



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

PARAMETER		SYMBOL	UNIT	SKBPC5018
Device marking code				SKBPC5018
Maximum Repetitive Peak Reverse Voltage		VRRM	V	1800
Maximum RMS Voltage		VRMS	V	1260
Maximum DC blocking Voltage		VDC	V	1800
Average rectified output current @60Hz sine wave, R-load	With heatsink Tc =55°C	IO	A	50
Forward Surge Current (Non-repetitive) @8.3ms Half-sine wave, 1 cycle, Tj=25°C		IFSM	A	500
Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode		I²t	A²s	1038
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 @Recommend torque: 5kg·cm		Tor	kg·cm	8

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SKBPC5018
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =25A	1.20
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	175

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

PARAMETER		SYMBOL	UNIT	SKBPC5018
Typical Thermal Resistance	Between junction and case, With heatsink	R _{θJ-C}	°C/W	0.9

Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

■Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SKBPC5018	A1	Approximate 19	50	50	500	Paper Box

■ Characteristics (Typical)

FIG1:I_o-T_c Curve

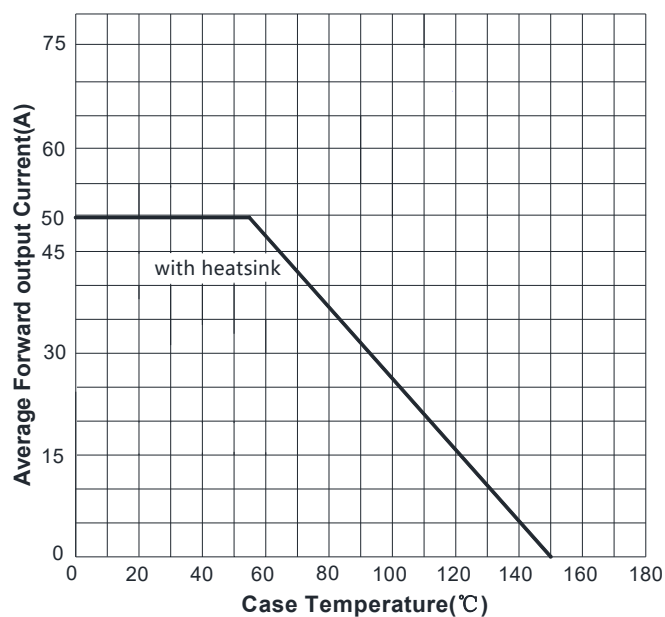


FIG2:Surge Forward Current Capability

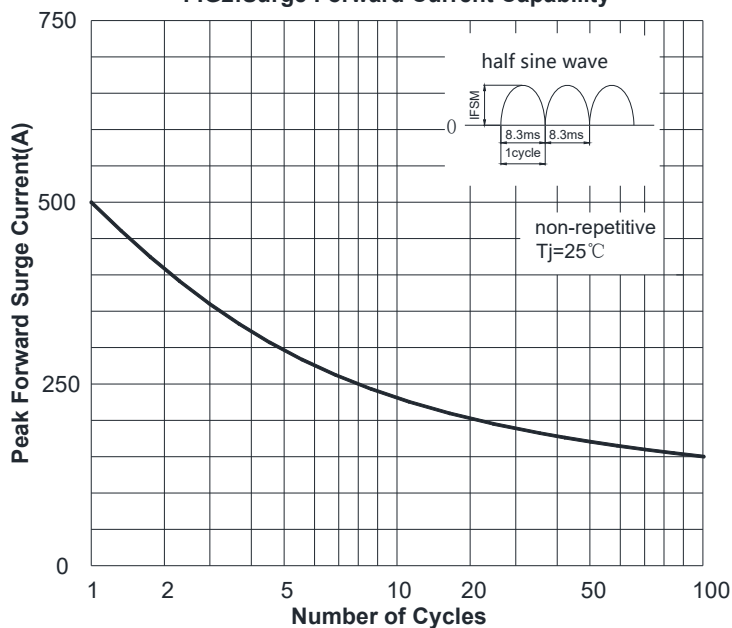
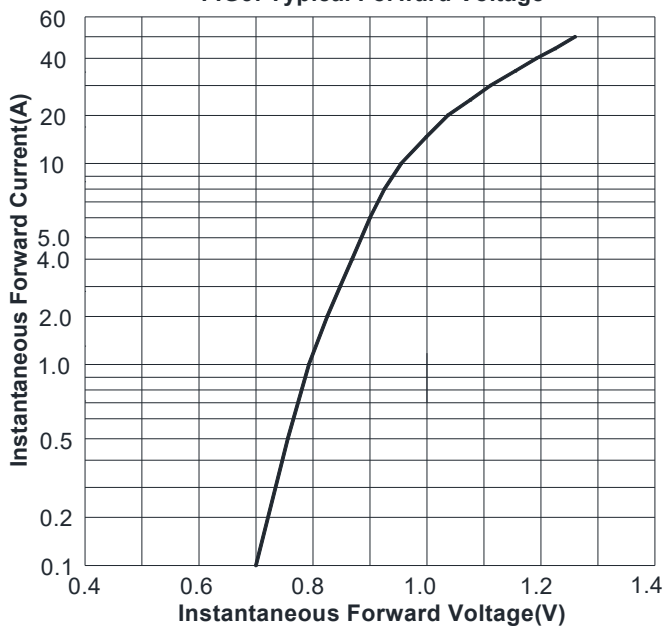
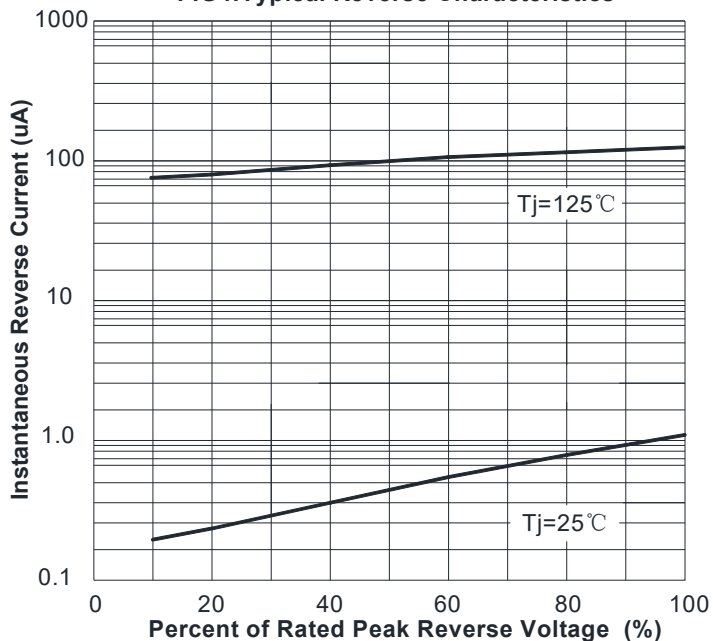
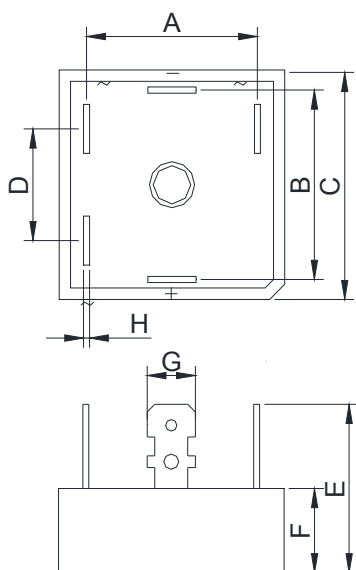


FIG3: Typical Forward Voltage

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

■ Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SKBPC5018	SKBPC	Approximate 19	50	50	500	Paper Box