

Three- Phase Bridge Rectifier Modules

V_{RRM} - 1000 to 1600 V

$I_{(AV)}$ - 100 A

FEATURES

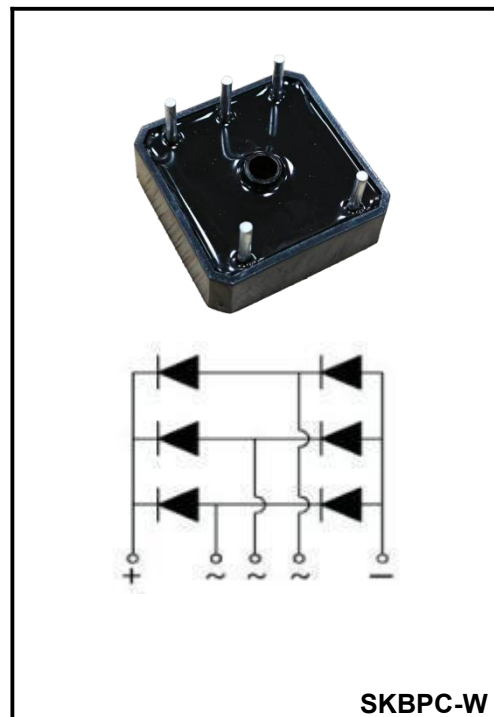
- ◆Glass passivated chip
- ◆Low reverse leakage current
- ◆High surge current capability

APPLICATIONS

- ◆Frequency converter
- ◆Industrial power supply

MECHANICAL DATA

- ◆Case:SKBPC-W
- ◆Polarity: Polarity symbols being marked on body
- ◆Mounting torque: 12.0 kgf.cm max
- ◆Weight : About 35.6 g rams



Maximum Ratings @ $T_a = 25^\circ\text{C}$ unless otherwise noted

Parameter	Symbols	SKBPC10010W	SKBPC10014W	SKBPC10016W	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1000	1400	1600	V
Maximum RMS voltage	V_{RMS}	700	980	1120	V
Maximum DC Blocking Voltage	V_{DC}	1000	1400	1600	V
Maximum Average Forward Rectified Current ,50Hz Sine wave resistance load $T_c=85^\circ\text{C}$	$I_{(AV)}$	100			A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	1000			A
Peak Forward Voltageat $I_F=50\text{A}$	V_F	1.1		1.2	V
Maximum Reverse Currentat $T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$	I_R	5 500			μA
Rating for fusing $1\text{ms} < t < 8.3\text{ms}$ $T_j=25^\circ\text{C}$, Rating of per diode	I^2t	3100			A^2s
Openrating junction Temperature	T_j	$-55 \sim +150$			$^\circ\text{C}$
Storage Temperature	T_{STG}	$-55 \sim +150$			$^\circ\text{C}$
Dielectric strength terminals to case AC 1 minute	V_{dis}	2.5			KV
Junction to ambient thermal resistance, without heatsink	$R_{\theta JA}$	28			$^\circ\text{C/W}$
Junction to case thermal resistance, with heatsink	$R_{\theta JC}$	0.91			$^\circ\text{C/W}$

Characteristic Curve

FIG1.Derating Curve For Output Rectified Current

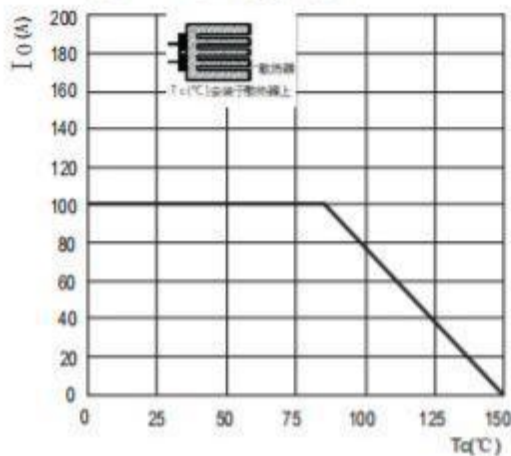


FIG2.Maximum NonRepetitive Peak ForwardSurge CurrentPer Bridge Element

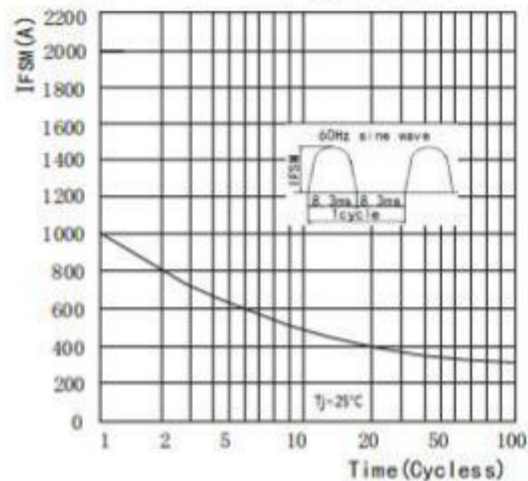


FIG3.Typical Reverse Characteristics Per Bridge Element

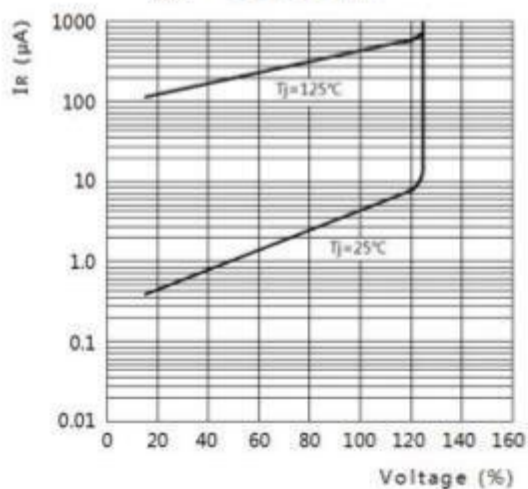
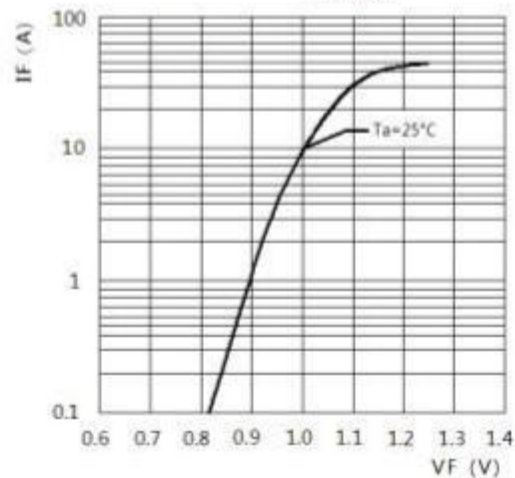
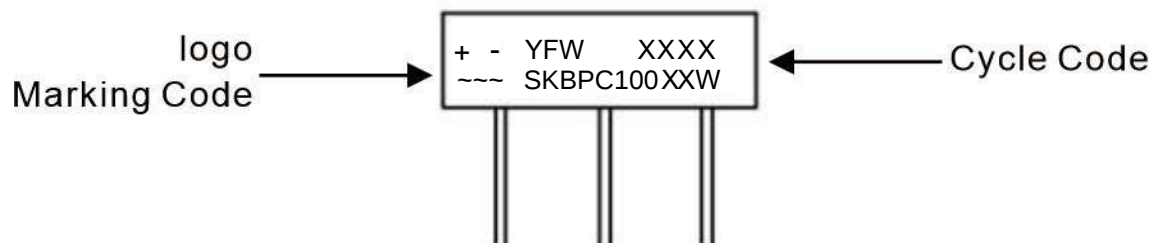


FIG4.Typical Forward Characteristics Per Bridge Element



Marking Diagram

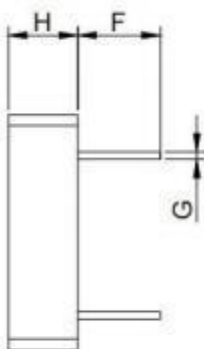
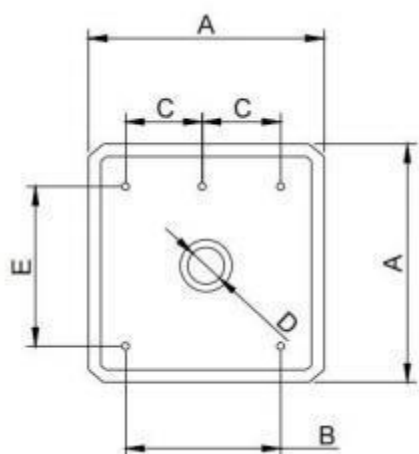


Ordering information

Package	Packing Description	Packing Quantity
SKBPC-W	bulk	50PCS/Box 500PCS/Carton

Package Dimensions

SKBPC-W



Dim.	Unit(mm)		Unit(inch)	
	Min.	Max.	Min.	Max.
A	36.00	37.00	1.41	1.45
B	21.50	22.50	0.84	0.88
C	10.50	11.50	0.41	0.45
D	4.50	5.50	0.17	0.21
E	27.20	28.20	1.07	1.11
F	8.70	9.30	0.34	0.36
G	1.80	2.20	0.07	0.08
H	11.20	12.20	0.44	0.48

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