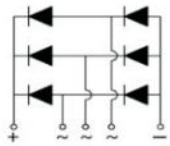
DACO®

SKBPC3510 THRU SKBPC3516

35A Three- Phase Bridge Rectifier Modules

■ Features



Glass passivated chip

Low reverse leakage current

High surge current capability

■ Applications

Frequency converter

Industrial power supply

KEY PARAMETERS		
PARAMETER	VALUE	UNIT
$I_{F(AV)}$	35	A
V_{RRM}	1000-1600	V
I_{FSM}	400	A
Package	SKBPC	

■ Mechanical Data

Case: SKBPC

Polarity: Polarity symbols being marked on body

Mounting torque:12.0 kgf.cm max

Weight: About18 grams

■ Maximum Ratings @ Ta = 25℃ unless otherwise noted

PARAMETER		SYMBOL	SKBPC3510	SKBPC3512	SKBPC3514	SKBPC3516	UNIT
Maximum recurrent peak reverse voltage		V_{RRM}	1000	1200	1400	1600	V
Average rectified output current	T_C =85℃ with heatsink,T_C =85℃	$I_{(AV)}$	35				A
Peak surge forward current, 8.3 ms single half sine-wave superimposed on rated load		I_{FSM}	400				A
Rating for fusing, 1 ms< t <8.3 ms, Tj = 25℃, per diode		I^2t	1223				A^2s
Junction temperature		Tj	-55 ~ +150				℃
Storage temperature		T_{STG}	-55 ~ +150				℃
Dielectric strength, terminals to case: AC 1 minute		V_{dis}	2.5				KV

■ Electrical Characteristics @ Ta = 25℃ unless otherwise noted

PARAMETER	CONDITIONS		SYMBOL	RATED VALUE	UNIT
Peak Forward Voltage	I_F =17.5A		V_F	1.1	V
Peak Reverse Current	VR=VRRM, pulse measurement, per diode	Tj=25℃	I_R	5	μA
		Tj=125℃		500	

■ Thermal Characteristics @ Ta =25℃ unless otherwise noted

PARAMETER	SYMBOL	RATED VALUE	UNIT
Junction to ambient thermal resistance,without heatsink	$R_{\theta JA}$	18	℃/W
Junction to case thermal resistance, with heatsink	$R_{\theta JC}$	1.2	℃/W

■ Characteristic Curve

FIG 1.Derating Curve For Output Rectified Current

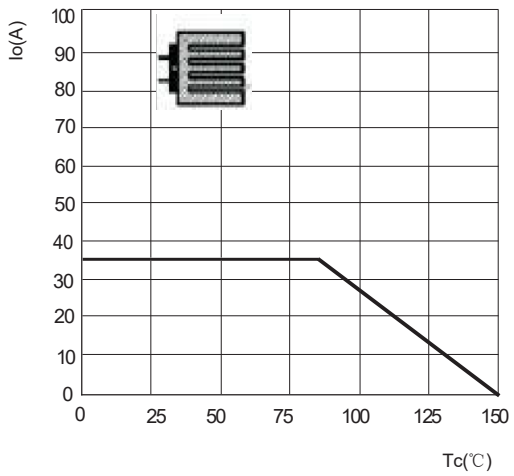


FIG2.Maximum Non-Repetitive Peak ForwardSurge

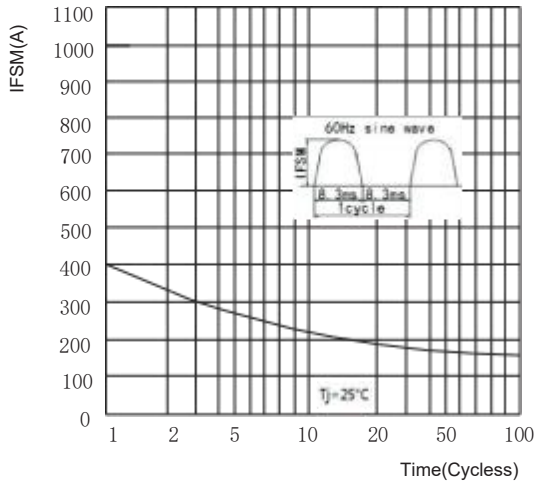


FIG3.Typical Reverse Characteristics Per Bridge Element

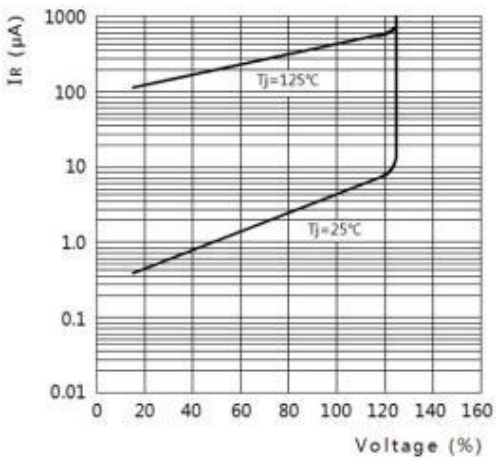
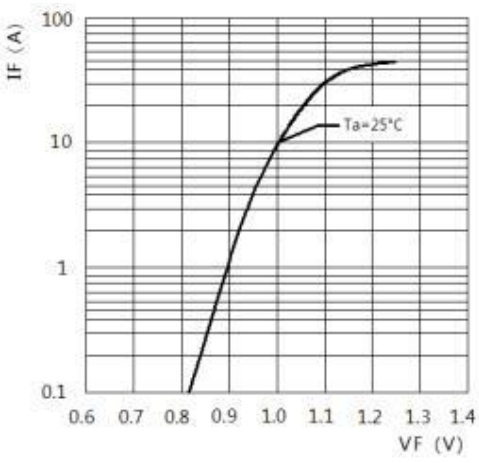
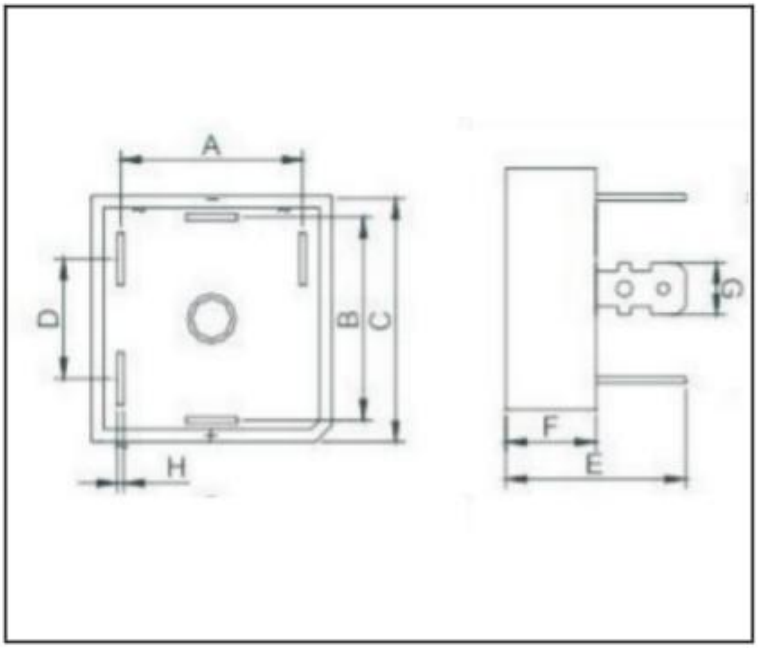


FIG4.Typical Forward Characteristics Per Bridge Element



■ Dimension Drawing



Dim.	Unit(mm)		Unit(inch)	
	Min.	Max.	Min.	Max.
A	23.00	24.00	0.906	0.945
B	23.00	24.00	0.906	0.945
C	28.20	29.20	1.110	1.149
D	15.00	17.00	0.590	0.699
E	22.50	23.50	0.886	0.925
F	10.70	11.30	0.421	0.445
G	6.10	6.50	0.240	0.256
H	0.60	0.80	0.024	0.030

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