

CURRENT 50.0 Ampere
 VOLTAGE RANG 400 to 1600 Volts

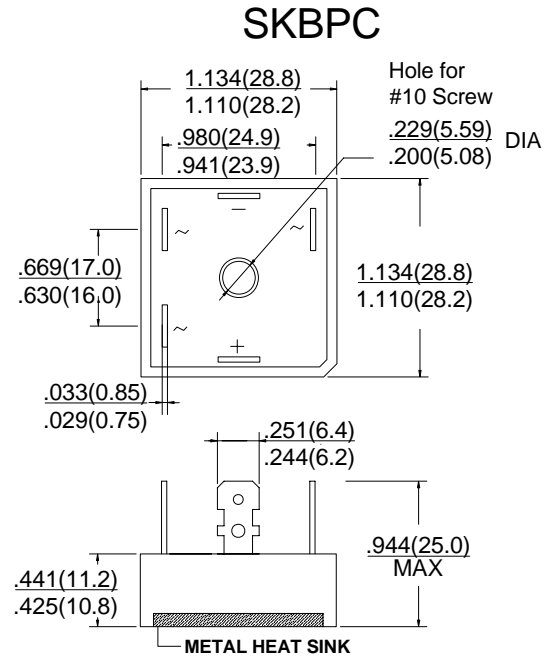
SKBPC5004 THRU SKBPC5016

■ Features

- This series is SGS listed under the Recognized Component Index, file number SZXEC1902259902
- I_o 35A
- V_{RRM} 400V~1600V
- Glass passivated chip
- High surge forward current capability

■ Applications

- General purpose 3 phase Bridge rectifier applications



Dimensions for inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	Conditions	SKBC 5004	SKBPC 5006	SKBPC 5008	SKBPC 5010	SKBPC 5012	SKBPC 5014	SKBPC 5016	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}		400	600	800	1000	1200	1400	1600	V
Average Rectified Output Current	I_o	60Hz sine wave, R-load With heatsink $T_c=55^\circ\text{C}$	50							A
Surge(Nonrepetitive) Forward Current	I_{FSM}	60Hz sine wave, 1 cycle, $T_a=25^\circ\text{C}$	500							A
Current Squared Time	I^2t	1ms≤t<8.3ms $T_j=25^\circ\text{C}$ Rating of per diode	1040							A ² S
Storage Temperature	T_{STG}		-40~+150							°C
Junction Temperature	T_j		-55~+150							°C
Dielectric Strength	V_{dis}	Terminals to case, AC 1 minute	2.5							KV
Item	SYMBOL	UNIT	Test Condition							Max
Peak Forward Voltage	V_{FM}	V	$I_{FM}=25\text{A}$, Pulse measurement, Rating of per							1.2
Peak Reverse Current	I_{RRM}	uA	$V_{RM}=V_{RRM}$, Pulse measurement, Rating of per diode							10
Thermal Resistance	$R_{\theta J-C}$	°C/W	Between junction and case, With heatsink							0.9

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Rating and Characteristic Curves ($T_A=25^{\circ}\text{C}$ Unless otherwise noted)

图1: I_o - T_c 曲线
 FIG1: I_o - T_c Curve

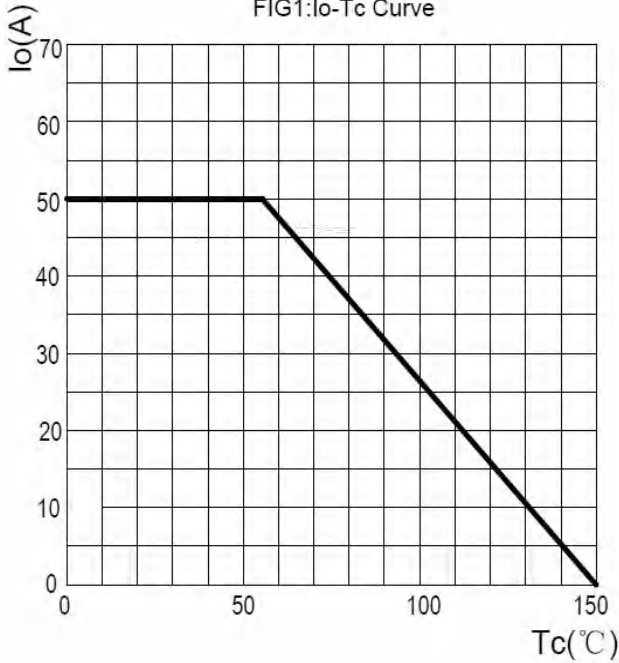


图2: 耐正向浪涌电流曲线
 FIG2:Surge Forward Current Capability

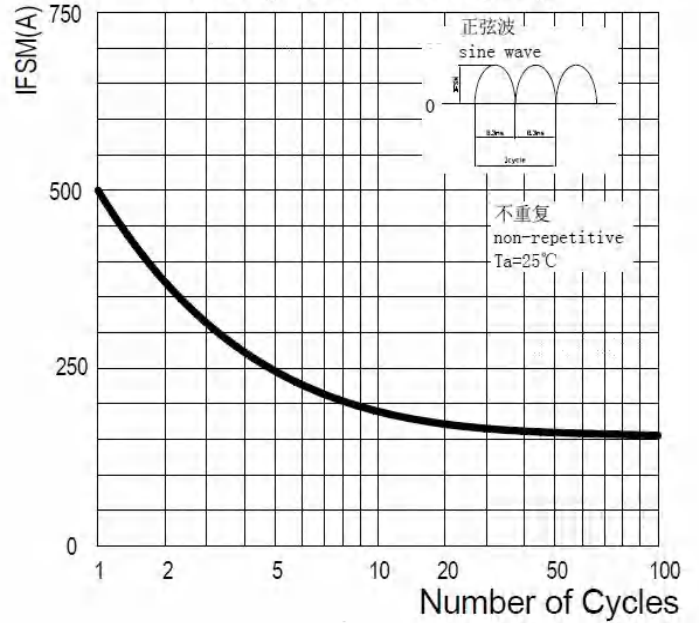


图3: 正向电压曲线
 FIG3:Instantaneous Forward Voltage

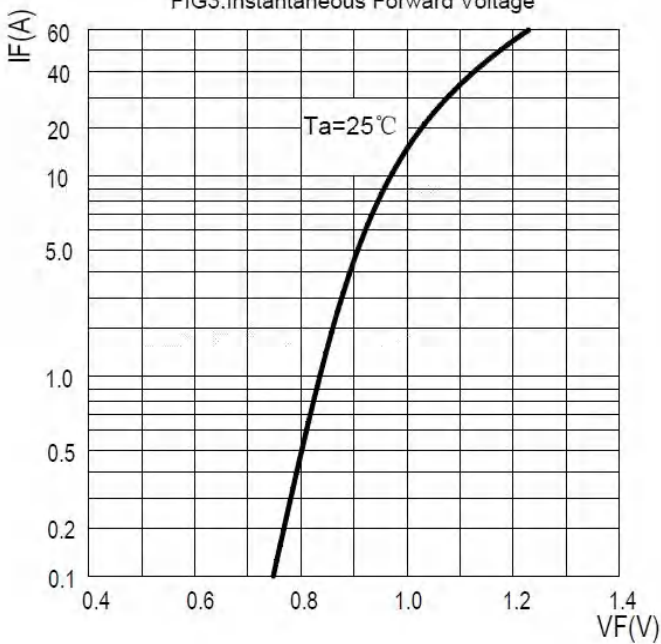


图4: 反向电流曲线
 FIG4:Typical Reverse Characteristics

