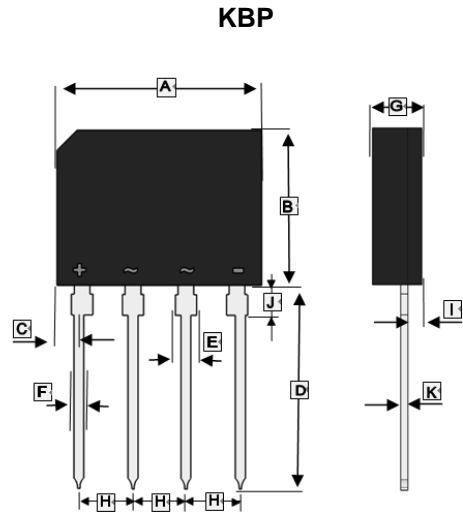


RoHS Compliant Product

## FEATURES

- Ideal for printed circuit board
- Low forward voltage drop, high current capability
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- These are Halogen & Pb Free components
- This series is UL recognized under Component Index, file number E255340



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	14.30	14.70	G	3.40	3.60
B	10.80	11.20	H	3.70	3.90
C	1.35	1.75	I	0.90	1.10
D	14.00	15.00	J	2.10	2.30
E	1.30	1.70	K	0.40	0.60
F	0.60	0.80			

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

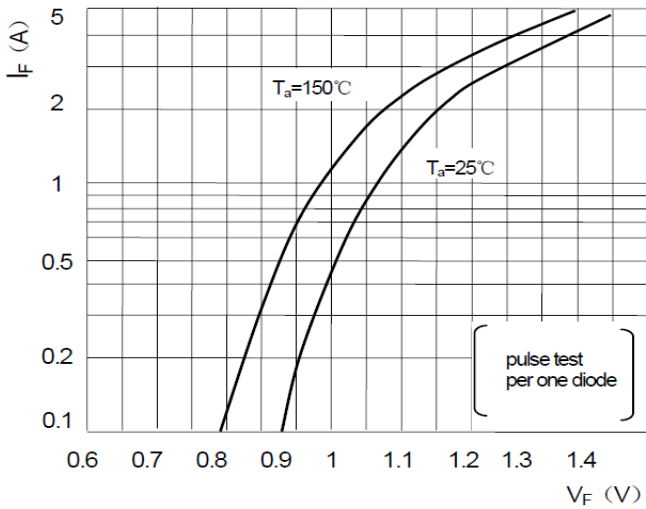
(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, de-rate current by 20%.)

Parameter	Symbol	Part Number				Unit
		S3KBP20-C	S3KBP40-C	S3KBP60-C	S3KBP80-C	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	200	400	600	800	V
Average Rectified Output Current @50Hz sine wave, R-load	$T_C=140^\circ\text{C}$ (with heatsink)	3				A
	$T_A=25^\circ\text{C}$ (without heatsink)	2				
	$T_C=92^\circ\text{C}$ (without heatsink)	2				
Peak Forward Surge Current @ 50Hz sine wave, 1 cycle, $T_A=25^\circ\text{C}$	$I_{FSM}$	80				A
Maximum Peak Forward Voltage <sup>2</sup>	$V_{FM}$	1.05				V
Peak Reverse Current <sup>1</sup>	$I_{RRM}$	10				$\mu\text{A}$
$I^2t$ Rating for Fusing @ $1\text{ms} \leq t < 8.3\text{ms}$ , $T_J=25^\circ\text{C}$ , Rating of per diode	$I^2t$	34				$\text{A}^2\text{s}$
Typical Thermal Resistance (with heat sink)	$R_{\theta JC}$	1.5				$^\circ\text{C/W}$
Typical Thermal Resistance (without heat sink)	$R_{\theta JA}$	45				$^\circ\text{C/W}$
Typical Thermal Resistance (without heat sink)	$R_{\theta JL}$	8				$^\circ\text{C/W}$
Operating and Storage temperature range	$T_J, T_{STG}$	150, -40~150				$^\circ\text{C}$

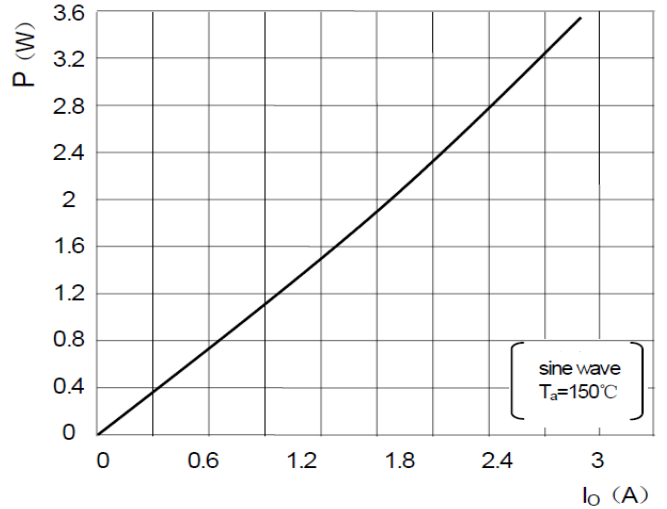
Notes :

1.  $V_{RM}=V_{RRM}$ , Pulse measurement, Rating of per diode.
2.  $I_{FM}=1.5\text{A}$ , Pulse measurement, Rating of per diode

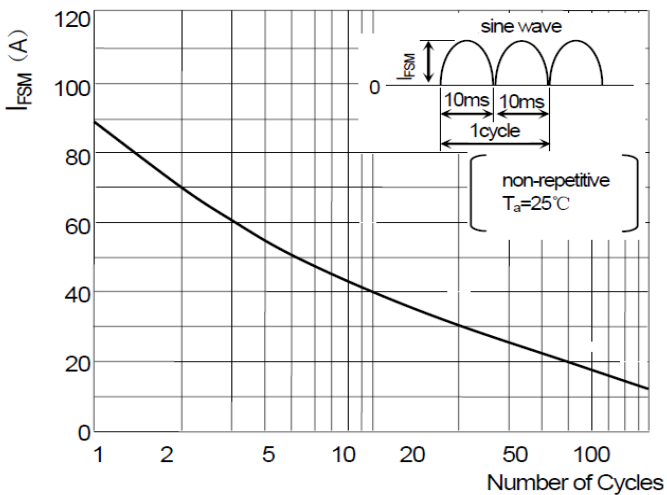
**RATINGS AND CHARACTERISTIC CURVES**



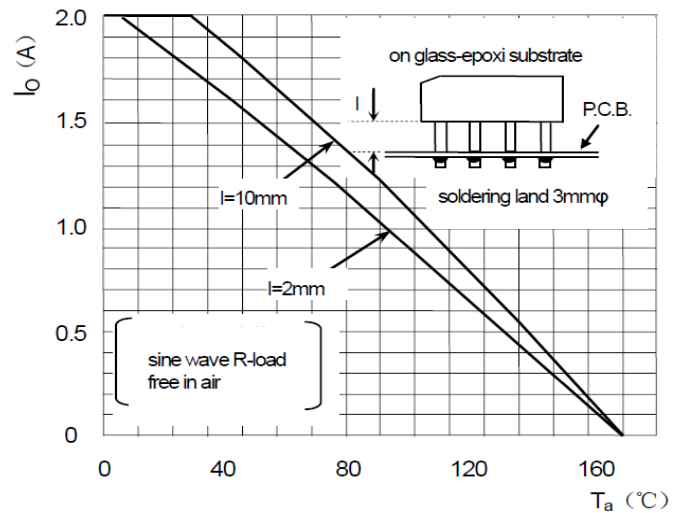
Forward Characteristics



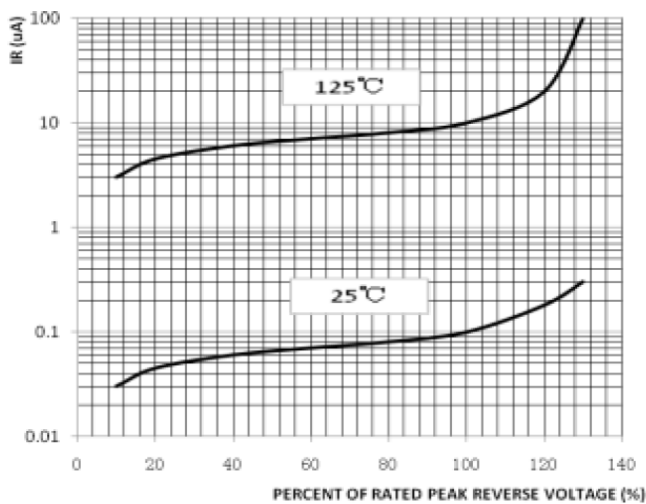
P-I<sub>o</sub> Curve



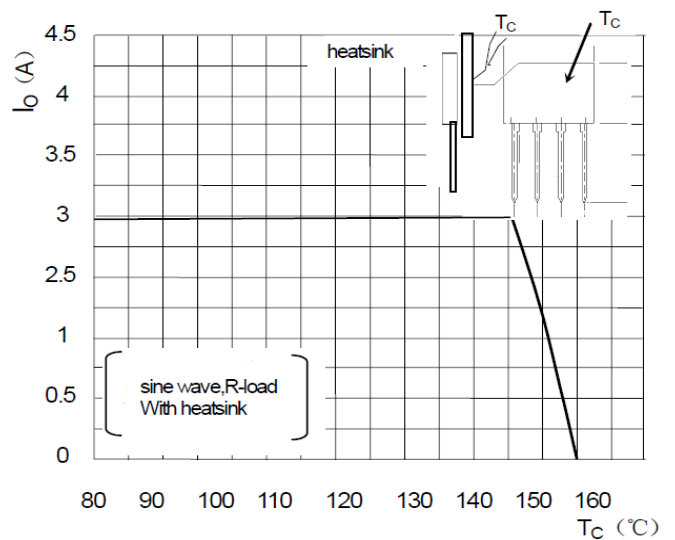
Surge Forward Current Capability



I<sub>o</sub>-T<sub>a</sub> Curve



IR-V<sub>RM</sub> Curve



I<sub>o</sub>-T<sub>c</sub> Curve