



Micro Commercial Components
21201 Itasca Street Chatsworth
CA 91311

Phone: (818) 701-4933

Fax: (818) 701-4939

KBPC1000S

THRU

KBPC1010S

Features

- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards
- Designed for Saving Mounting Space

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

Microsemi Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
KBPC1000S	KBPC1000S	50V	35V	50V
KBPC1001S	KBPC1001S	100V	70V	100V
KBPC1002S	KBPC1002S	200V	140V	200V
KBPC1004S	KBPC1004S	400V	280V	400V
KBPC1006S	KBPC1006S	600V	420V	600V
KBPC1008S	KBPC1008S	800V	560V	800V
KBPC1010S	KBPC1010S	1000V	700V	1000V

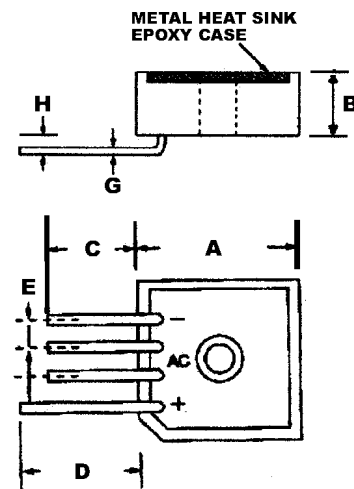
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	10.0A	$T_A = 50^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	200A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	V_F	1.2V	$I_{FM} = 5.0\text{A}$ per element; $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	10 μA 1.0mA	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$

*Pulse test: Pulse width 300 μsec , Duty cycle 1%

10 Amp Single Phase Bridge Rectifier 50 to 1000 Volts

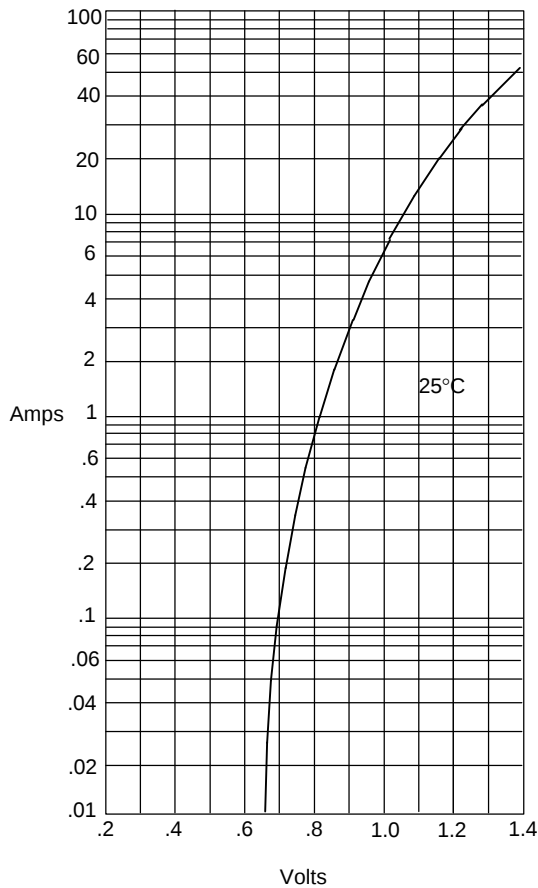
KBPC



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.12	1.13	28.40	28.70	
B	.432	.442	10.97	11.23	
C	.547	---	13.90	---	
D	.752	---	19.10	---	
E	.201	---	5.10	---	
G	.047	---	1.20	---	Ø
H	.120	.142	3.05	3.60	

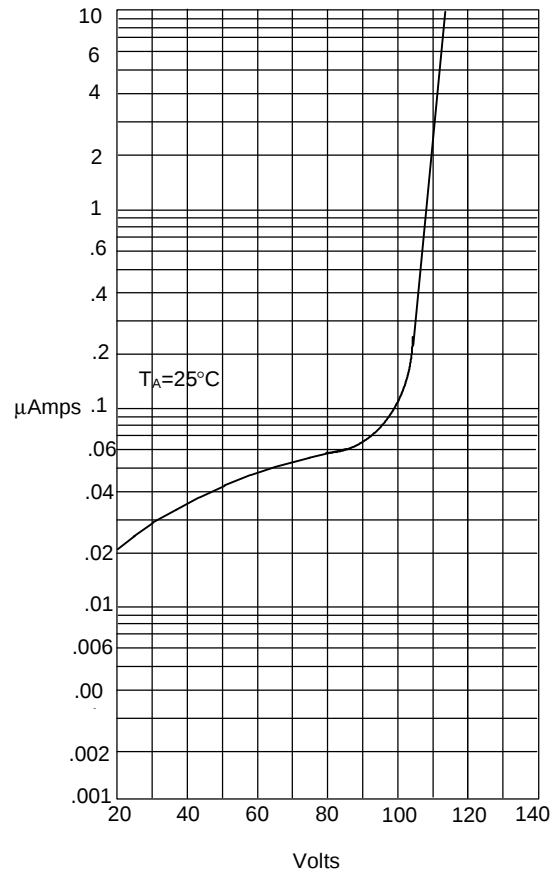
KBPC1000S thru KBPC1010S

Figure 1
Typical Forward Characteristics



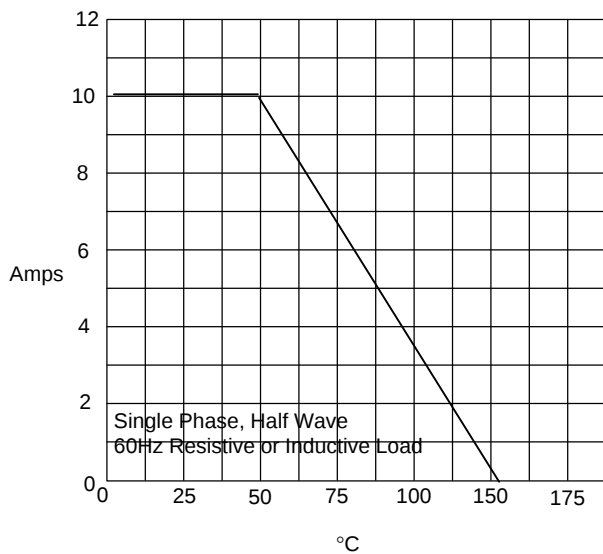
Instantaneous Forward Current - Amperes
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



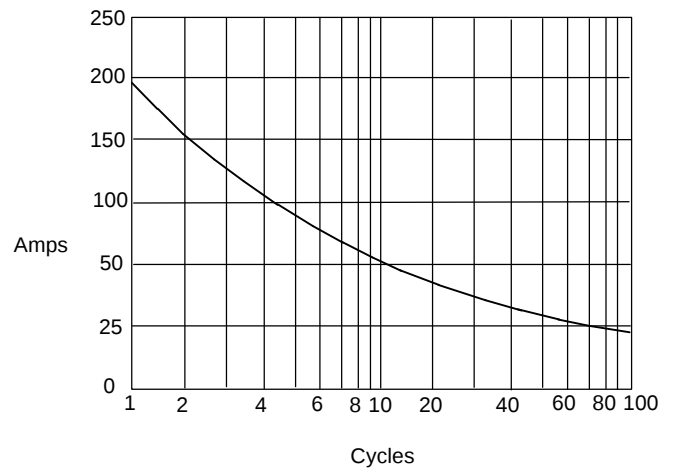
Instantaneous Reverse Leakage Current - MicroAmperes
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3
Forward Derating Curve



Average Forward Rectified Current - Amperes
Ambient Temperature - °C

Figure 4
Peak Forward Surge Current



Peak Forward Surge Current - Amperes
Number Of Cycles At 60Hz - Cycles