



Micro Commercial Components



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## Features

- UL Recognized File # E165989
- Marking : type number
- Glass Passivated Die Construction
- High Surge Current Capability
- Case Material: Molded Plastic.UL Flammability Classification Rating 94V-0 and MSL Rating 1
- Lead Free Finish/RoHS Compliant (NOTE 3)("P" Suffix designates RoHS Compliant. See ordering information)

## Maximum Ratings

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

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
KBP005M	50V	35V	50V
KBP01M	100V	70V	100V
KBP02M	200V	140V	200V
KBP04M	400V	280V	400V
KBP06M	600V	420V	600V
KBP08M	800V	560V	800V
KBP10M	1000V	700V	1000V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.5A	$T_a = 50^\circ\text{C}$ Note1
Peak Forward Surge Current	$I_{FSM}$	50A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	$V_F$	1.1V	$I_F = 1.5\text{A per element};$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10 $\mu\text{A}$ 0.5mA	$T_a = 25^\circ\text{C}$ $T_a = 100^\circ\text{C}$
Typical Junction Capacitance per element	$C_j$	15PF	Measured at 1MHZ, VR=4V(DC)
Typical Thermal Resistance	$R_{thja}$	28 K/W	Note2

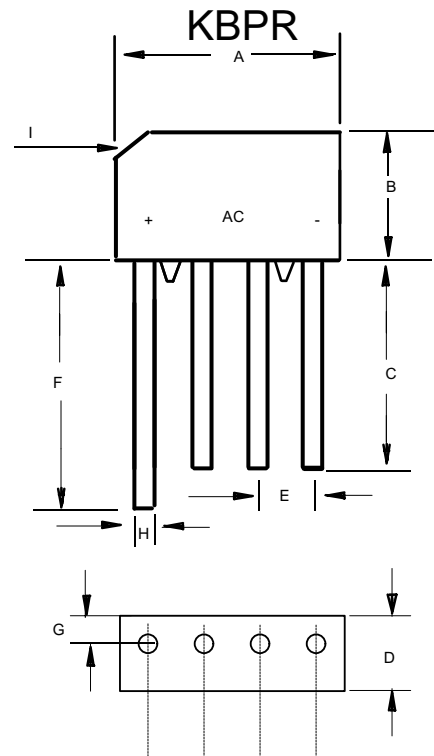
Note: 1. Leads maintained at ambient temp. at a distance of 9.5mm from the case

2. Mounted on PC board with 12mm<sup>2</sup> copper pad

3. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7

## KBP005M THRU KBP10M

## 1.5 Amp Glass Passivated Bridge Rectifier 50 to 1000 Volts



DIMENSION					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.560	.600	14.32	15.24	
B	.420	.460	10.70	11.70	
C	.500	---	12.70	---	
D	.132	.144	3.35	3.65	
E	.140	.160	3.60	4.10	
F	.600	---	15.24	---	
G	.035	.047	0.90	1.20	
H	.028	.034	0.76	0.86	
I	0.12X45		3.0X45		

[www.mccsemi.com](http://www.mccsemi.com)

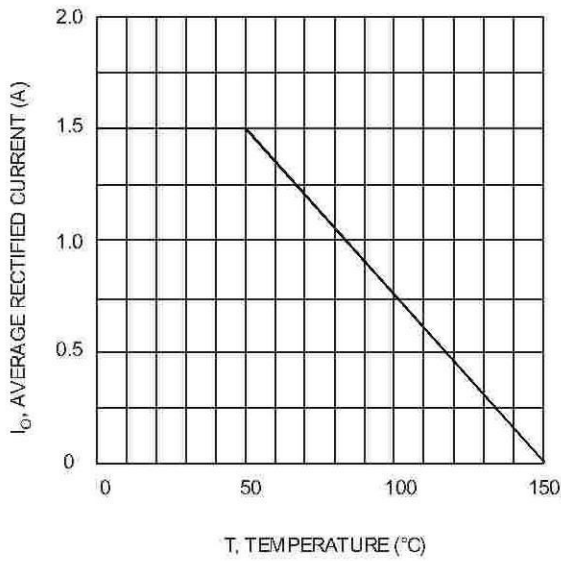


Fig. 1 Forward Current Derating Curve

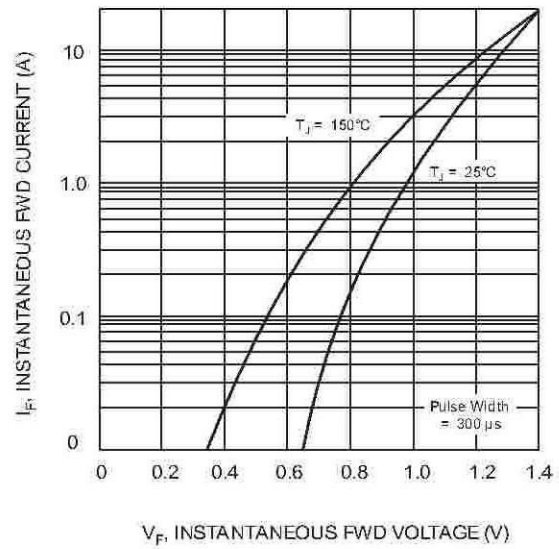


Fig. 2 Typical Fwd Characteristics

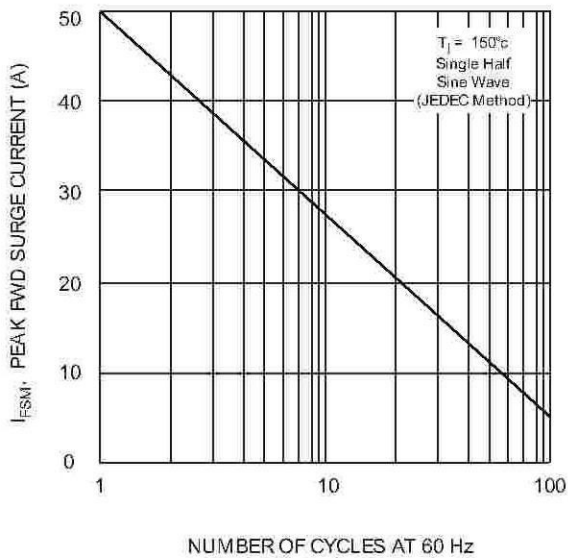


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

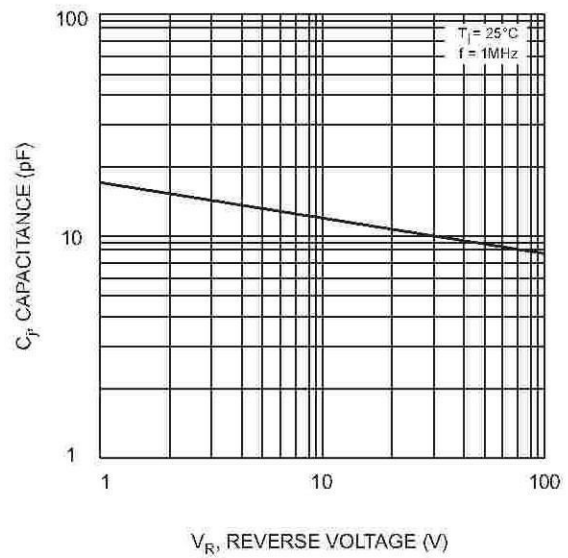


Fig. 4 Typical Junction Capacitance

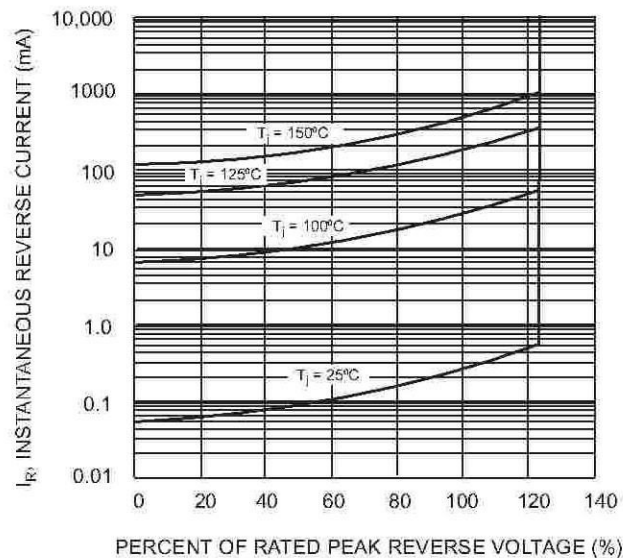


Fig. 5 Typical Reverse Characteristics

## Ordering Information

Device	Packing
(Part Number)-BP	Bulk;5Kpcs/Ctn

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