

# KI SEMICONDUCTOR

## KBJ4A THRU KBJ4M

### Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- UL Recognized File # E165989

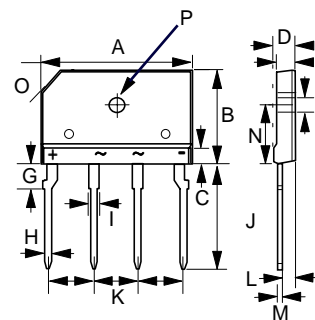
**4 Amp  
GLASS PASSIVATED  
BRIDGE RECTIFIERS  
50 to 1000 Volts**

### Maximum Ratings

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

Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
KBJ4005	KBJ4A	50V	35V	50V
KBJ401	KBJ4B	100V	70V	100V
KBJ402	KBJ4D	200V	140V	200V
KBJ404	KBJ4G	400V	280V	400V
KBJ406	KBJ4J	600V	420V	600V
KBJ408	KBJ4K	800V	560V	800V
KBJ410	KBJ4M	1000V	700V	1000V

### KBJ



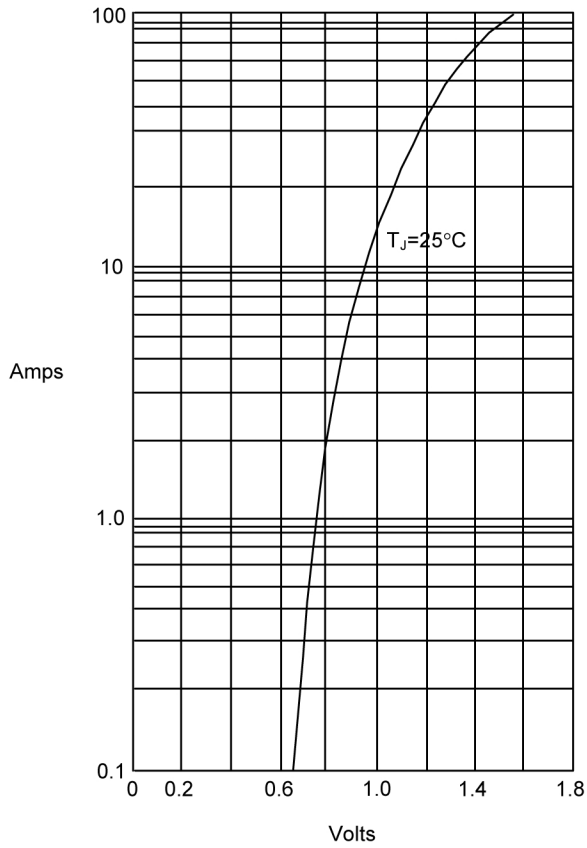
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	4.0A	$T_C = 100^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	150A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	$V_F$	1.0V	$I_{FM} = 2.0\text{A}$ per element; $T_A = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10 $\mu\text{A}$ 500 $\mu\text{A}$	$T_A = 25^\circ\text{C}$ $T_C = 100^\circ\text{C}$
$I^2t$ Rating for fusing	$I^2t$	93A <sup>2</sup> S	( $t < 8.35\text{ms}$ )

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.976	.992	24.80	25.20	
B	.579	.602	14.70	15.30	
C	.154	.161	3.90	4.10	
D	.173	.189	4.40	4.80	
E	.134	.150	3.40	3.80	
F	.122	.134	3.10	3.40	∅
G	.130	.146	3.30	3.70	
H	.035	.043	0.90	1.10	
I	.059	.075	1.50	1.90	
J	.677	.700	17.20	17.80	
K	.287	.303	7.30	7.70	
L	.098	.114	2.50	2.90	
M	.024	.031	0.60	0.80	
N	.366	.381	9.30	9.70	
O	.118X45°		3.0X45°		
P	.122	.134	3.10	3.40	∅

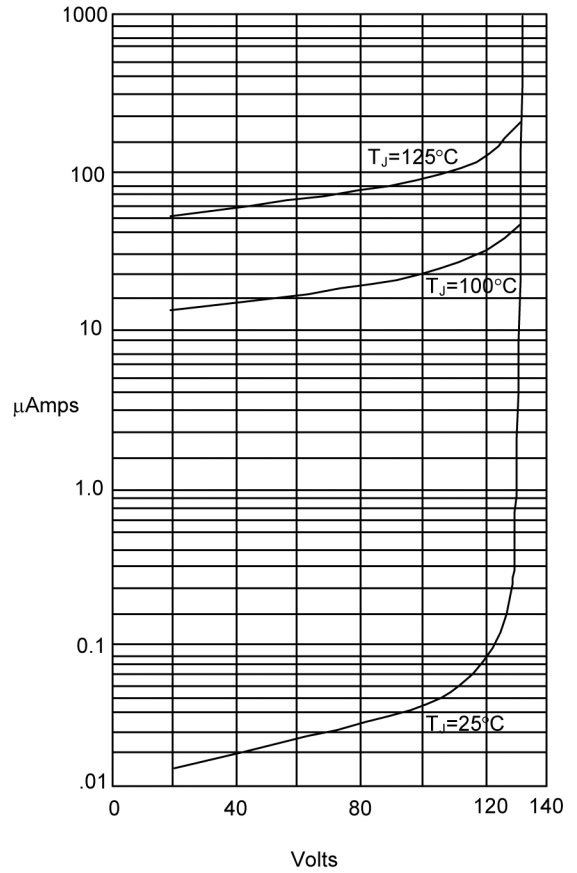
# KBJ4A THRU KBJ4M

Figure 1  
Typical Forward Characteristics



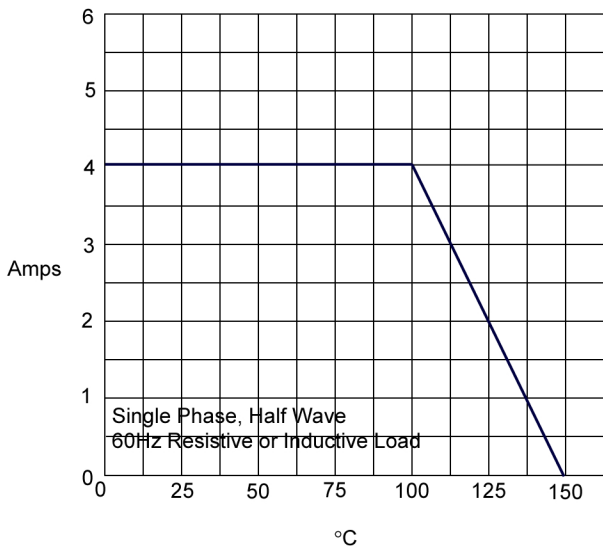
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



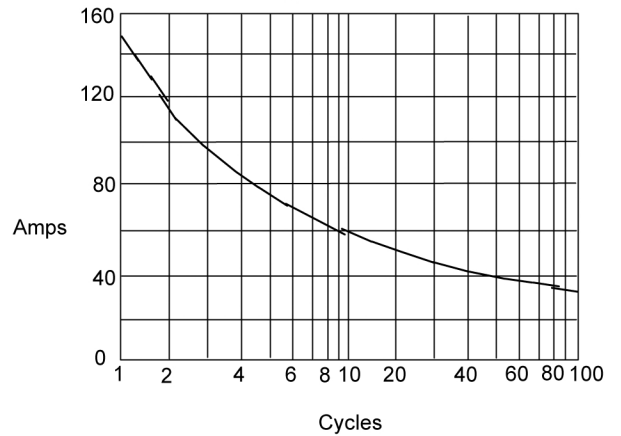
Instantaneous Reverse Leakage Current - MicroAmperes *versus*  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3  
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*  
Ambient Temperature - °C

Figure 4  
Peak Forward Surge Current



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