

# **KBU4A - KBU4M**

### **Features**

- High surge current capability.
- Reliable construction technique.
- Ideal for printed circuit board.



# **Bridge Rectifiers**

### **Absolute Maximum Ratings\*** T<sub>A</sub> = 25°C unless otherwise noted

Symbol	Parameter	Value						Units	
		4A	4B	4D	4G	4J	4K	4M	<u> </u>
$V_{RRM}$	Maximum Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
V <sub>RMS</sub>	Maximum RMS Bridge Input Voltage	35	70	140	280	420	560	700	V
$V_R$	DC Reverse Voltage (Rated V <sub>R</sub> )	50	100	200	400	600	800	1000	V
I <sub>F(AV)</sub>	Average Rectified Forward Current, @ T <sub>A</sub> = 50°C	4.0		Α					
I <sub>FSM</sub>	Non-repetitive Peak Forward Surge Current	200			Α				
T <sub>stg</sub>	Storage Temperature Range	-55 to +150			°C				
T <sub>J</sub>	Operating Junction Temperature	-55 to +150		°C					

<sup>\*</sup>These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

### **Thermal Characteristics**

Symbol	Parameter	Value	Units
$P_{D}$	Power Dissipation	6.6	W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient,* per leg	19	°C/W
$R_{\theta JL}$	Thermal Resistance, Junction to Lead,* per leg	4.0	°C/W

<sup>\*</sup>Device mounted on PCB with 0.375 " (9.5 mm) lead length and 0.5  $\times$  0.5" (13  $\times$  13 mm) copper pads.

# **Electrical Characteristics** T<sub>A</sub> = 25°C unless otherwise noted

Symbol	Parameter	Device	Units
$V_{F}$	Forward Voltage, per bridge @ 4.0 A	1.0	V
I <sub>R</sub>	Reverse Current, total bridge @ rated $V_R$ $T_A = 25^{\circ}C$ $T_A = 100^{\circ}C$	5.0 500	μ <b>Α</b> μ <b>Α</b>

# **Bridge Rectifiers**

(continued)

# **Typical Characteristics**

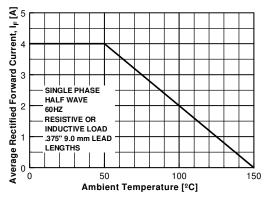
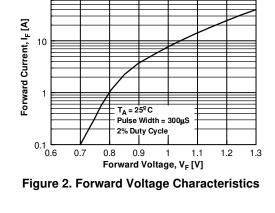


Figure 1. Forward Current Derating Curve



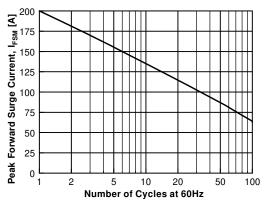


Figure 3. Non-Repetitive Surge Current

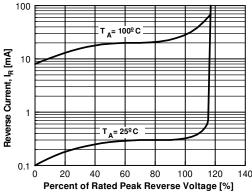


Figure 4. Reverse Current vs Reverse Voltage

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