June 2010



KBU8A - KBU8M Bridge Rectifiers

Features

- · High surge current capability.
- · Reliable construction technique.
- · Ideal for printed circuit board.
- · UL Certificate # E326243.



Absolute Maximum Ratings* T_A= 25°C unless otherwise noted

Symbol	Parameter	Value						Units	
		8A	8B	8D	8G	8J	8K	8M	Units
V _{RRM}	Maximum Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
V _{RMS}	Maximum RMS Bridge Input Voltage		70	140	280	420	560	700	V
V _R	DC Reverse Voltage (Rated V _R)	50	100	200	400	600	800	1000	V
I _{F(AV)}	Average Rectified Forward Current, @ T _A = 50°C	8.0			Α				
I _{FSM}	Non-repetitive Peak Forward Surge Current	300			Α				
T _{STG}	Storage Temperature Range	-55 to +150			°C				
T _J	Operating Junction Temperature		-55 to +150					°C	

^{*} 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	6.9	W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient,* per leg	18	°C/W
$R_{\theta JL}$	Thermal Resistance, Junction to Lead,* per leg	3.0	°C/W

^{*} Device mounted on PCB with 0.375 " (9.5 mm) lead length and 0.5 x 0.5" (13 x 13 mm) copper pads.

Electrical Characteristics T_A= 25°C unless otherwise noted

Symbol	Parameter	Value	Units
V _F	Forward Voltage, per bridge @ 8.0 A	1.0	V
I _R	Reverse Current, total bridge @ rated V_R T_A = 25°C T_A = 100°C	10 500	μ Α μ Α

Typical Performance Characteristics

Figure 1. Forward Current Derating Curve

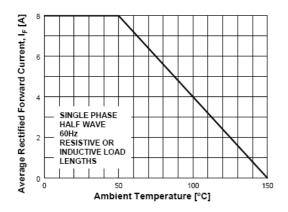


Figure 2. Forward Voltage Characteristics

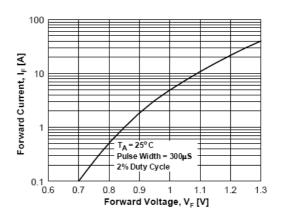


Figure 3. Non-Repetitive Surge Current

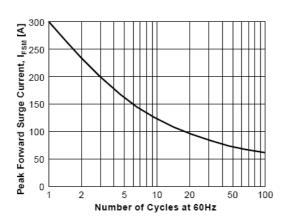
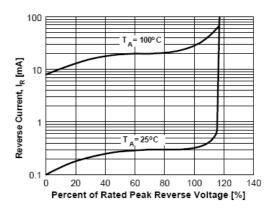


Figure 4. Reverse Current vs Reverse Voltage





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