July 2010



KBU6A - KBU6M 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	
Syllibol	Faiametei	6A	6B	6D	6G	6J	6K	6M	Ullits
V_{RRM}	Maximum Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
V _{RMS}	Maximum RMS Bridge Input Voltage	35	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 = 65°C	6.0		Α					
I _{FSM}	Non-repetitive Peak Forward Surge Current	250		Α					
T _{STG}	Storage Temperature Range -55 to +150			°C					
TJ	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		
P _D	Power Dissipation	6.7	W	
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient,* per leg	8.6	°C/W	
$R_{ heta JL}$	Thermal Resistance, Junction to Lead,* per leg	4.0	°C/W	

^{*} Device mounted on PCB with 0.375 " (9.5 mm) lead length and 0.5 x 0.5" (12 x 12 mm) copper pads.

Electrical Characteristics T_A= 25°C unless otherwise noted

Symbol	Parameter	Value	Units
V _F	Forward Voltage, per bridge @ 6.0 A	1.0	V
I _R	Reverse Current, total bridge @ rated V_R T_A = 25°C T_A = 100°C	5.0 500	μ Α μ Α

Typical Performance Characteristics

Figure 1. Forward Current Derating Curve

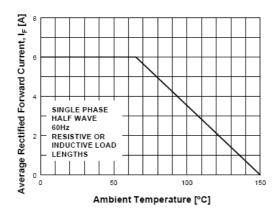


Figure 2. Non-Repetitive Surge Current

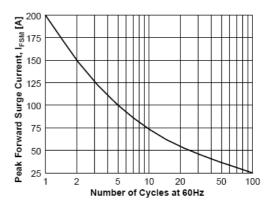


Figure 3. Forward Voltage Characteristics

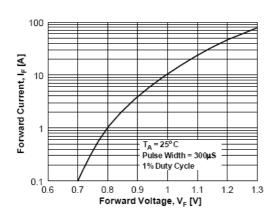
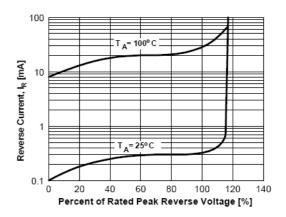


Figure 4. Reverse Current vs Reverse Voltage







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