



## KBU8A - KBU8M



### Features

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

### Bridge Rectifiers

#### Absolute Maximum Ratings\*

$T_A = 25^\circ\text{C}$  unless otherwise noted

Symbol	Parameter	Value							Units
		8A	8B	8D	8G	8J	8K	8M	
$V_{RRM}$	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, @ $T_A = 50^\circ\text{C}$	8.0							A
$I_{FSM}$	Non-repetitive Peak Forward Surge Current	300							A
$T_{stg}$	Storage Temperature Range	-55 to +150							$^\circ\text{C}$
$T_J$	Operating Junction Temperature	-55 to +150							$^\circ\text{C}$

\*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	$^\circ\text{C}/\text{W}$
$R_{\theta JL}$	Thermal Resistance, Junction to Lead,* per leg	3.0	$^\circ\text{C}/\text{W}$

\* 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

$T_A = 25^\circ\text{C}$  unless otherwise noted

Symbol	Parameter	Device	Units
$V_F$	Forward Voltage, per bridge @ 8.0 A	1.0	V
$I_R$	Reverse Current, total bridge @ rated $V_R$		
	$T_A = 25^\circ\text{C}$	10	$\mu\text{A}$
	$T_A = 100^\circ\text{C}$	500	$\mu\text{A}$



## Bridge Rectifiers (continued)

### Typical Characteristics

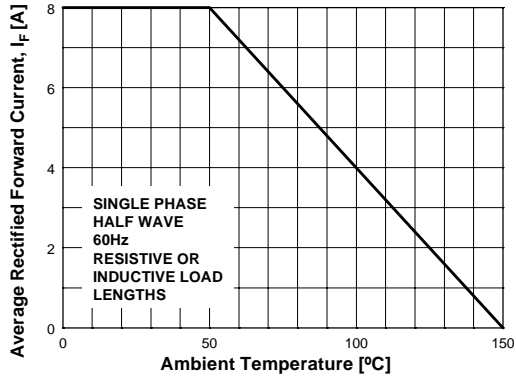


Figure 1. Forward Current Derating Curve

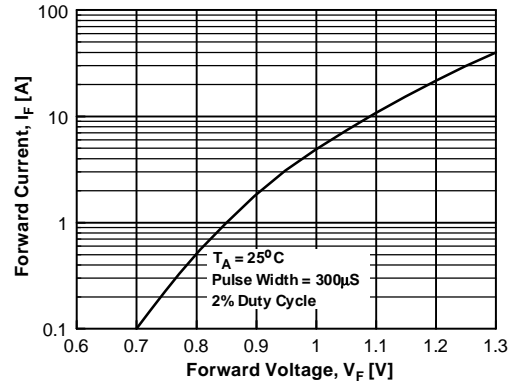


Figure 2. Forward Voltage Characteristics

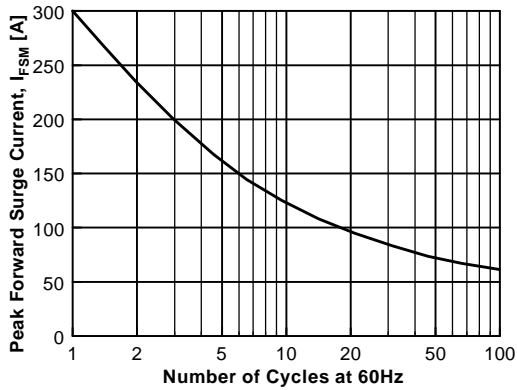


Figure 3. Non-Repetitive Surge Current

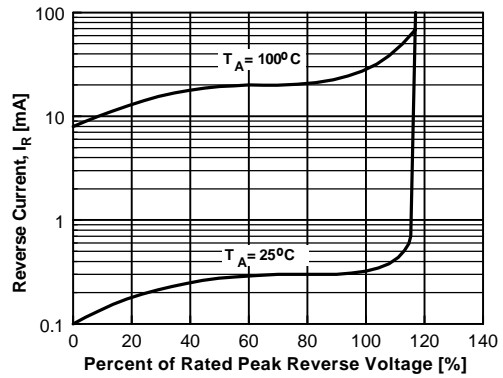


Figure 4. Reverse Current vs Reverse Voltage

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