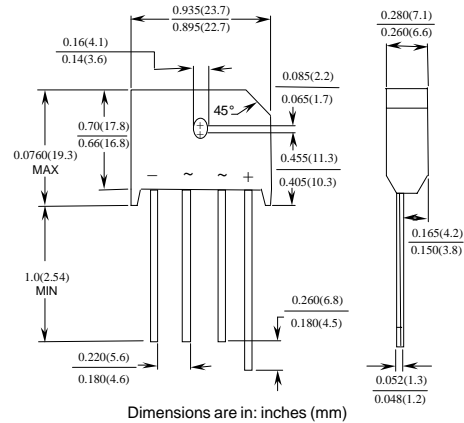


## KBU8A - KBU8M

### Features

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



## 8.0 Ampere Silicon Bridge Rectifiers

### Absolute Maximum Ratings\*

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

Symbol	Parameter	Value	Units
$I_O$	Average Rectified Current @ $T_A = 50^\circ\text{C}$	8.0	A
$I_{f(\text{surge})}$	Peak Forward Surge Current	300	A
$P_D$	Total Device Dissipation Derate above $25^\circ\text{C}$	6.9 55	W mW/ $^\circ\text{C}$
$R_{\theta JA}$	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	$^\circ\text{C}/\text{W}$
$T_{\text{stg}}$	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.

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

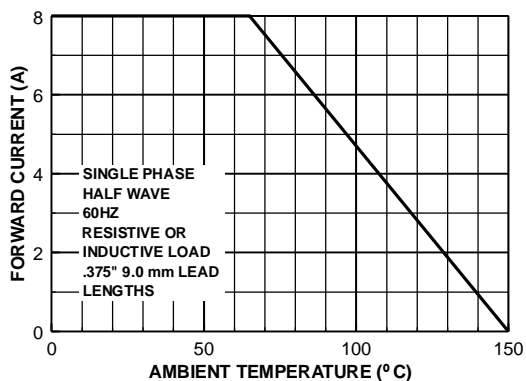
### Electrical Characteristics

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

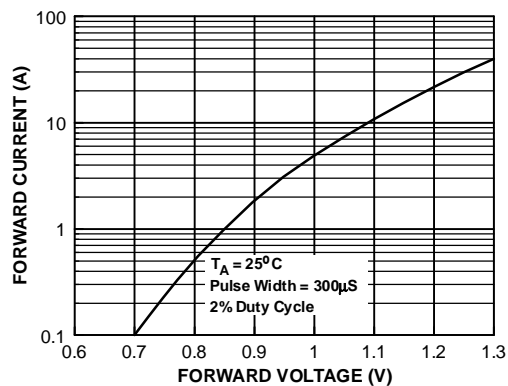
Parameter	Device							Units	
	8A	8B	8D	8G	8J	8K	8M		
Peak Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V	
Maximum RMS Bridge Input Voltage	35	70	140	280	420	560	700	V	
DC Reverse Voltage (Rated $V_R$ )	50	100	200	400	600	800	1000	V	
Maximum Reverse Leakage, total bridge @ rated $V_R$									
$T_A = 25^\circ\text{C}$								10	$\mu\text{A}$
$T_A = 100^\circ\text{C}$								500	$\mu\text{A}$
Maximum Forward Voltage Drop, per bridge @ 8.0 A								1.0	V

Typical Characteristics

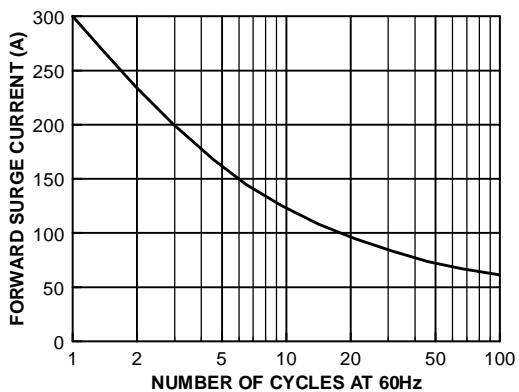
Forward Current Derating Curve



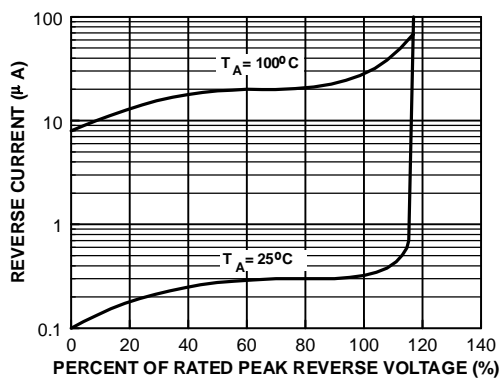
Forward Characteristics



Non-Repetitive Surge Current



Reverse Characteristics



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FACT™	QS™
FACT Quiet Series™	Quiet Series™
FAST®	SuperSOT™-3
FASTr™	SuperSOT™-6
GTO™	SuperSOT™-8
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