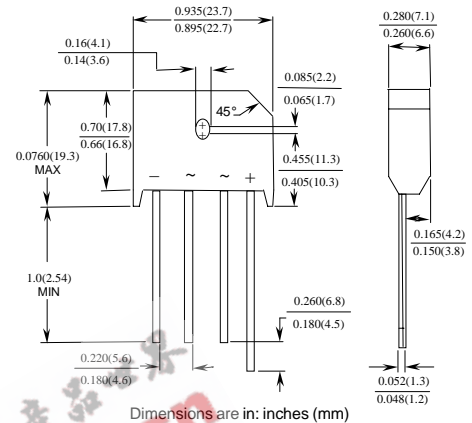


## KBU4A - KBU4M

### Features

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



### 4.0 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 @ $T_A = 50^\circ\text{C}$	4.0	A
$i_f(\text{surge})$	Peak Forward Surge Current	200	A
$P_D$	Total Device Dissipation Derate above $25^\circ\text{C}$	6.6 53	W mW/ $^\circ\text{C}$
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient,** per leg	19	$^\circ\text{C}/\text{W}$
$R_{\theta JL}$	Thermal Resistance, Junction to Lead,** per leg	4.0	$^\circ\text{C}/\text{W}$
$T_{stg}$	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.

\*\* 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	
	4A	4B	4D	4G	4J	4K	4M		
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 $V_R$ $T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$								5.0 500	$\mu\text{A}$ $\mu\text{A}$
Maximum Forward Voltage Drop, per bridge @ 4.0 A								1.0	V

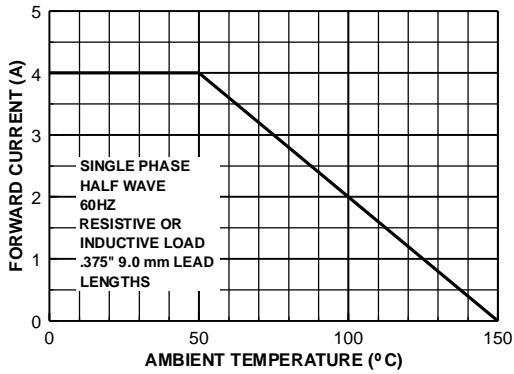
# Silicon Bridge Rectifiers

(continued)

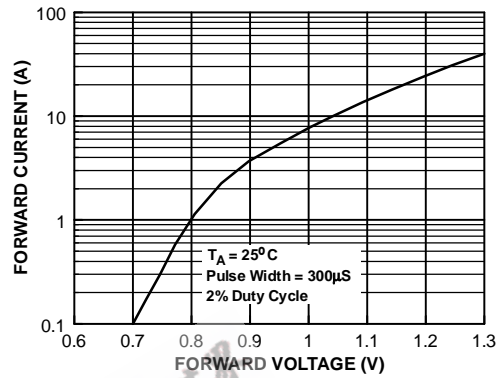
KBU4A - KBU4M

## Typical Characteristics

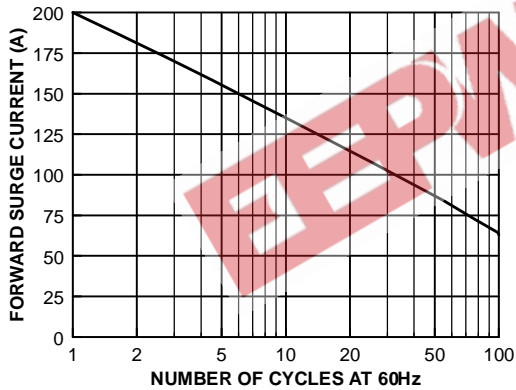
Forward Current Derating Curve



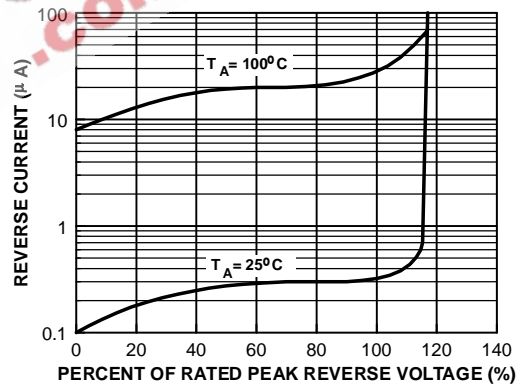
Forward Characteristics



Non-Repetitive Surge Current



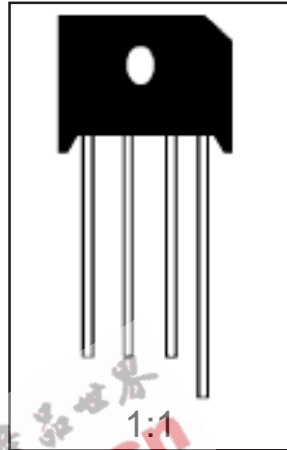
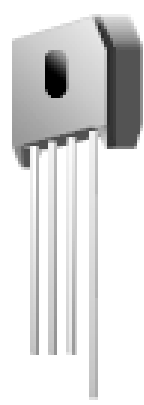
Reverse Characteristics



# KBU Package Dimensions



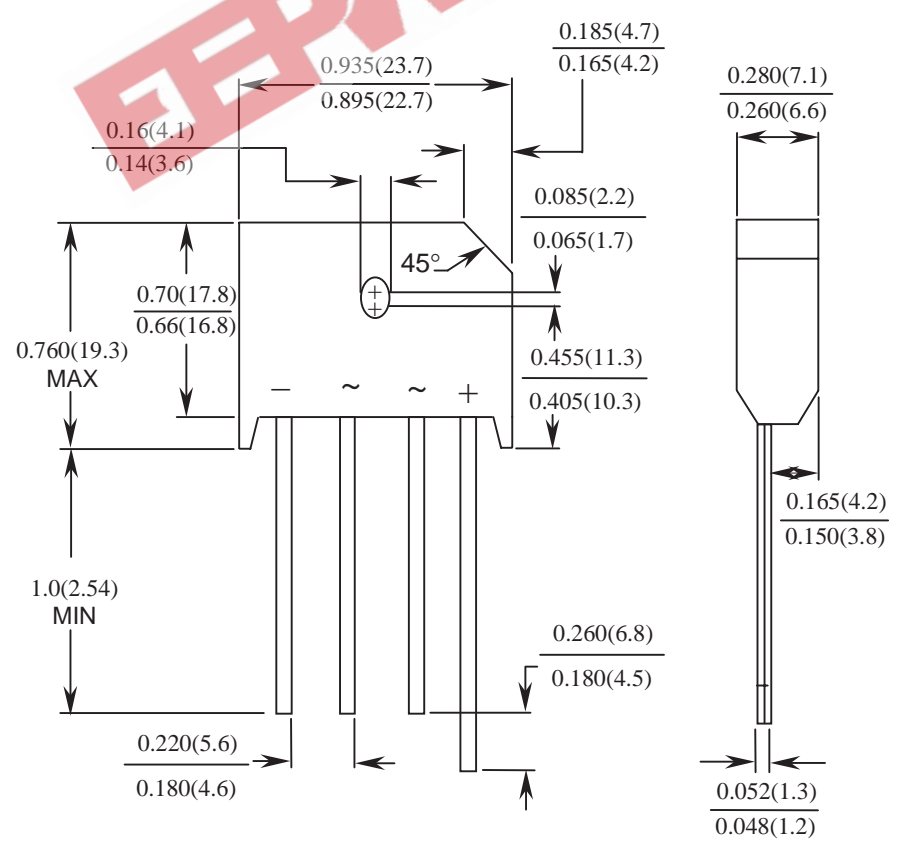
## KBU (FS PKG Code R7)



Scale 1:1 on letter size paper

Dimensions shown below are in:  
inches [millimeters]

Part Weight per unit (gram): 8.0



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E <sup>2</sup> CMOS™	PowerTrench®	
FACT™	QFET™	
FACT Quiet Series™	QS™	
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FASTr™	SuperSOT™-3	
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HiSeC™	SuperSOT™-8	

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