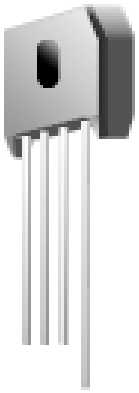
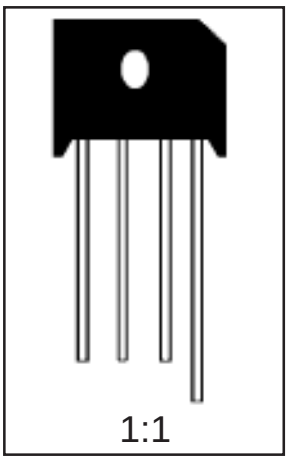
KBU Package Dimensions

FAIRCHILD SEMICONDUCTOR™

KBU (FS PKG Code R7)

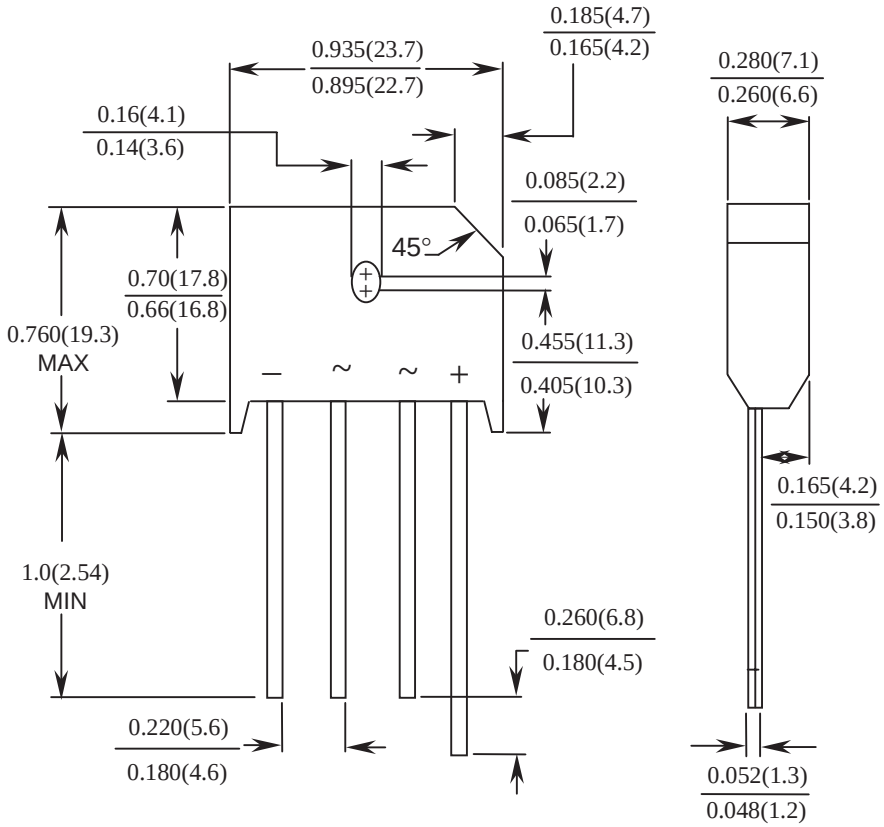




Scale 1:1 on letter size paper

Dimensions shown below are in:
inches [millimeters]

Part Weight per unit (gram): 8.0



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Datasheet Identification	Product Status	Definition
Advance Information	Formative or In Design	This datasheet contains the design specifications for product development. Specifications may change in any manner without notice.
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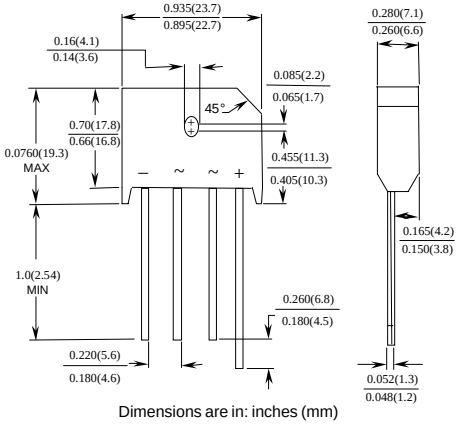
FAIRCHILD SEMICONDUCTOR TM

Discrete POWER & Signal Technologies

KBU6A - KBU6M



Dimensions are in: inches (mm)

Features

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

6.0 Ampere Silicon Bridge Rectifiers

Absolute Maximum Ratings*

T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
I_O	Average Rectified Current @ T_A = 65°C	6.0	A
$i_{f(surge)}$	Peak Forward Surge Current	250	A
P_D	Total Device Dissipation Derate above 25°C	6.7 54	W mW/°C
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient,** per leg	8.6	°C/W
$R_{\theta JC}$	Thermal Resistance, Junction to Case,** per leg	4.0	°C/W
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.

**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

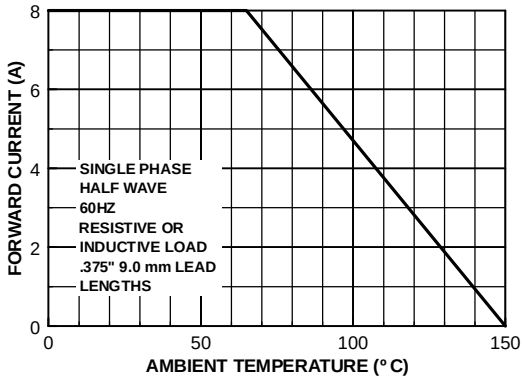
T_A = 25°C unless otherwise noted

Parameter	Device							Units
	6A	6B	6D	6G	6J	6K	6M	
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°C T_A = 100°C	5.0 500							µA µA
Maximum Forward Voltage Drop, per bridge @ 6.0 A	1.0							V

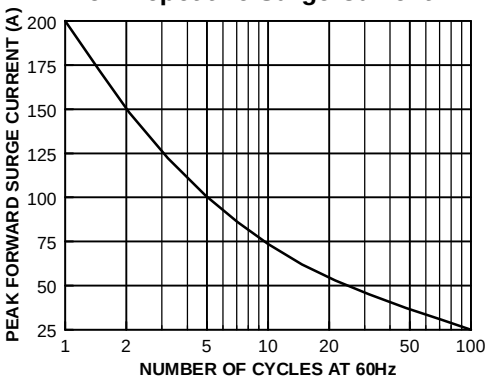
Silicon Bridge Rectifiers
(continued)

Typical Characteristics

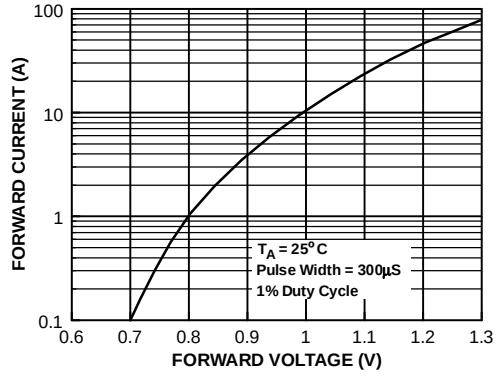
Forward Current Derating Curve



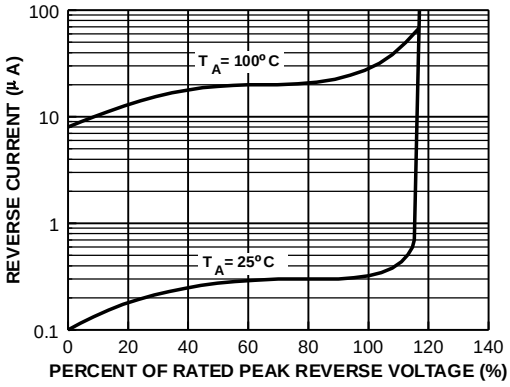
Non-Repetitive Surge Current



Forward Characteristics



Reverse Characteristics



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