

# Bridge Rectifier

## **KBU6G**

400V / 6A

# DATASHEET

from

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OEM – General Semiconductor

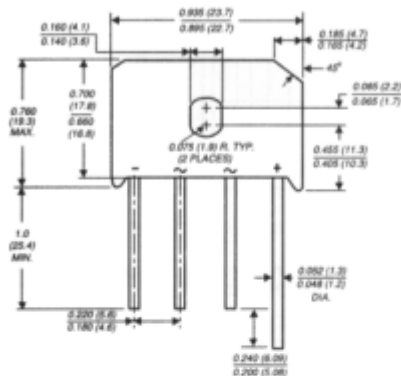
Source: General Semiconductor Databook 1998

# KBU6A THRU KBU6M

## SINGLE-PHASE BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 6.0 Amperes

Case Style KBU



Dimensions in inches and (millimeters)

### FEATURES

- ◆ Plastic material used carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ This series is UL listed under Recognized Component Index, file number E54214
- ◆ High case dielectric strength of 1500 VRMS
- ◆ Ideal for printed circuit boards
- ◆ High surge current capability
- ◆ High temperature soldering guaranteed: 250°C/10 seconds, 0.375" (9.5mm) lead length, 5lbs. (2.3 kg) tension



### MECHANICAL DATA

**Case:** Molded plastic body

**Terminals:** Plated leads solderable per MIL-STD-750, Method 2026

**Mounting Position:** Any (NOTE 1)

**Mounting Torque:** 5 in. - lb. max.

**Weight:** 0.3 ounce, 8.0 grams

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	KBU 6A	KBU 6B	KBU 6D	KBU 6G	KBU 6J	KBU 6K	KBU 6M	UNITS
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified output current at T <sub>C</sub> =100°C (NOTE 1, 2) T <sub>A</sub> =40°C (NOTE 3)	I <sub>(AV)</sub>				6.0				Amps
Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method) T <sub>J</sub> =150°C	I <sub>FSM</sub>				250.0				Amps
Maximum instantaneous forward voltage drop per leg at 6.0A	V <sub>F</sub>				1.0				Volts
Maximum DC reverse current at rated DC blocking voltage per leg T <sub>A</sub> =25°C T <sub>A</sub> =125°C	I <sub>R</sub>				5.0				μA
Typical thermal resistance per leg (NOTE 2)	R <sub>θJA</sub>				8.6				°C/W
	R <sub>θJC</sub>				3.1				
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>				-50 to +150				°C

**NOTES:**

- (1) Recommended mounted position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw
- (2) Thermal resistance from junction to ambient with units in free air, P.C.B. mounted on 0.5 x 0.5" (12 x 12mm) copper pads, 0.375" (9.5mm) lead length
- (3) Thermal resistance from junction to case with units mounted on a 2.6 x 1.4 x 0.06" thick (6.5 x 3.5 x 15cm) Al. Plate

**RATINGS AND CHARACTERISTICS CURVES KBU6A THRU KBU6M**

