# **KBU6A THRU KBU6M**

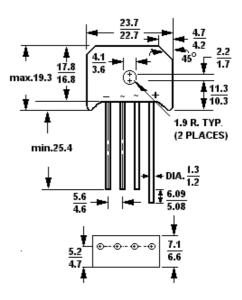
## SINGLE-PHASE BRIDGE RECTIFIERS Reverse Voltage – 50 to 1000 Volts Forward Current – 6.0 Amperes

#### **Features**

- Plastic material used carries Underwriters Laboratory Flammability Classification 94V-0
- High case dielectric strength of 1500 V<sub>RMS</sub>
- Ideal for printed circuit boards
- High surge current capability •
- High temperature soldering guaranteed: 250°C/10 seconds, 0.375 (9.5mm) lead length, 51bs. (2.3kg) tension

#### **Mechanical Data**

- Case: Molded plastic body
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026
- Mounting Position: Any (Note 1)
- Weight: 0.3 ounce, 8.0 grams



### Dimensions in mm

#### Absolute Maximum Ratings and Characteristics @ 25 °C unless otherwise specified.

	Symbols	KBU 6A	KBU 6B	KBU 6D	KBU 6G	KBU 6J	KBU 6K	KBU 6M	Units
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V <sub>CD</sub>	50	100	200	400	600	800	1000	V
Maximum average forward $T_c = 100^{\circ}C$ (Note 1,2) rectified output current at $T_A = 40^{\circ}C$ (Note 3)	I <sub>F(AV)</sub>	6 6							A
Peak forward surge current single_sine-wave superimposed on rated load (JEDEC Method) T <sub>J</sub> = 150 <sup>O</sup> C	I <sub>FSM</sub>	250							A
Maximum instantaneous forward voltage drop per leg at 6A	V <sub>F</sub>	1							V
Maximum DC reverse current $T_A = 25^{\circ}C$ at rated DC blocking voltage per leg $T_A = 125^{\circ}C$	I <sub>R</sub>	5 1							μA mA
Typical thermal resistance per leg (Note 2)	R <sub>θJA</sub> R <sub>θJC</sub>	8.6 3.1							<sup>o</sup> C/W
Operating junction and storage temperature range	TJ ,TS	-50 to +150							°C

(1). Recommended mounted position is to bolt down on heatsink with silicone thermal compound for maximum Notes: heat transfer with #6 screw.

(2). Thermal resistance from junction to ambient with units in free air, P.C.B. mounted on 0.5x0.5" (12x12mm) copper pads, 0.375" (9.5mm) lead length.

(3). Thermal resistance from junction to case with units mounted on a 2.6x1.4x0.06" thick (6.5x3.5x15 cm) Al. Plate









Dated : 07/10/2003

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