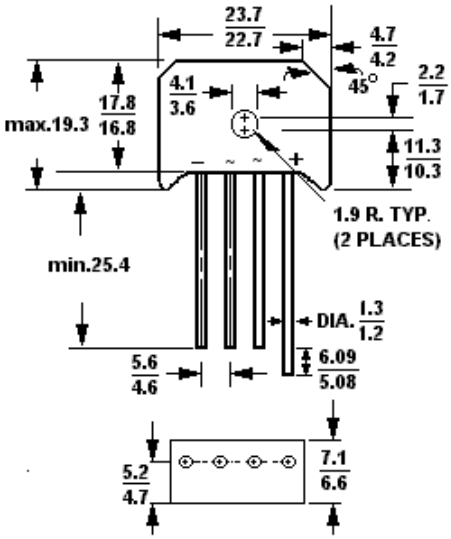
KBU6A THRU KBU6M

SINGLE-PHASE BRIDGE RECTIFIERS

Reverse Voltage – 50 to 1000 Volts

Forward Current – 6.0 Amperes



Dimensions in mm

Features

- Plastic material used carries Underwriters Laboratory Flammability Classification 94V-0
- High case dielectric strength of 1500 V_{RMS}
- 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

Absolute Maximum Ratings and Characteristics @ 25 ? 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_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{CD}	50	100	200	400	600	800	1000	V
Maximum average forward T_C = 100°C (Note 1,2) rectified output current at T_A = 40°C (Note 3)	$I_{F(AV)}$	6 6							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method) T_J = 150°C	I_{FSM}	250							A
Maximum instantaneous forward voltage drop per leg at 6A	V_F	1							V
Maximum DC reverse current T_A = 25°C at rated DC blocking voltage per leg T_A = 125°C	I_R	5 1							µA mA
Typical thermal resistance per leg (Note 2)	$R_{\theta JA}$ $R_{\theta JC}$	8.6 3.1							°C/W
Operating junction and storage temperature range	T_J ,T_S	-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 0.5x0.5” (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