

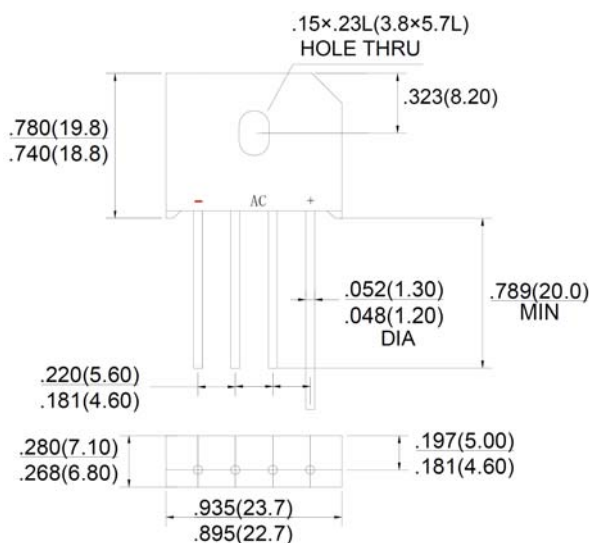
SINGLE-PHASE SILICON BRIDGE

KBU25005 THRU KBU2510 50 to 1000 V 25.0 A

FEATURES

- Low leakage
- Low forward voltage
- Mounting Position: Any
- General purpose 1 phase Bridge rectifier applications

KBU



Maximum Ratings and Electrical Characteristics

Dimensions in inches and (millimeters)

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60HZ, resistive or inductive load. For capacitive load, derate current by 20%.

MAXIMUM RATINGS (At TA=25°C, unless otherwise noted)

RATINGS	Symbol	KBU 25005	KUB 2501	KUB 2502	KUB 2504	KUB 2506	KUB 2508	KUB 2510	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Output Current at @ $T_C = 50^\circ C$	I_O	25							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	400							Amp
Current Squared Time 1ms ≤ t < 8.3ms $T_J = 25^\circ C$, Rating of per diode	I^2t	666							A ² S
Maximum Forward Voltage drop per element of 12.5A DC	V_F	1.1							Volts
Maximum DC Reverse Current at rated @ $T_A = 25^\circ C$	I_R	10							μAmp
Operating Temperature Range	T_J	-55 to +150							°C
Storage Temperature Range	T_{STG}	-55 to +150							°C
Thermal Resistance	RθJ-C	1.4 ⁽¹⁾							°C/W

Notes:

(1) Units Mounted on a aluminum plate heat sink.

RATINGS AND CHARACTERISTIC CURVES (KUB2501 thru KBU2507)

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FIG1:Io-T Curve

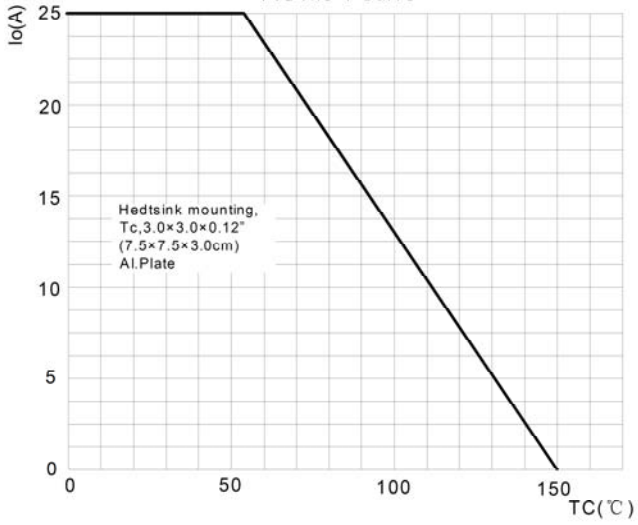


FIG2:Surge Forward Current Capadility

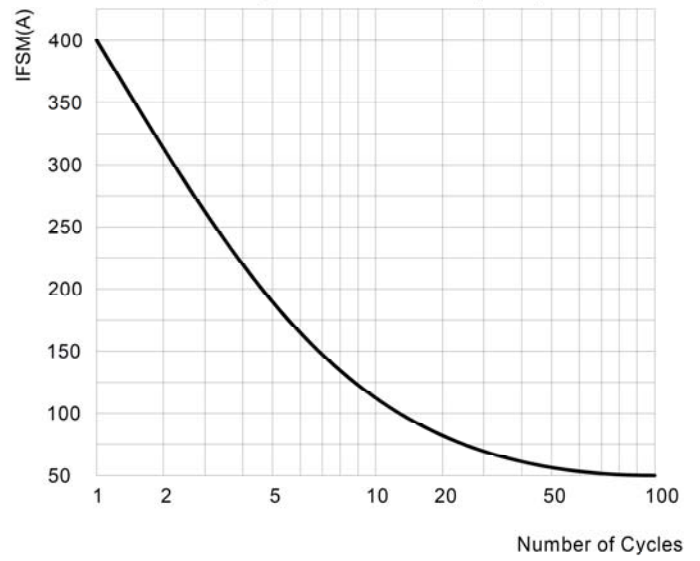


FIG3:Instantaneous Forward Voltage

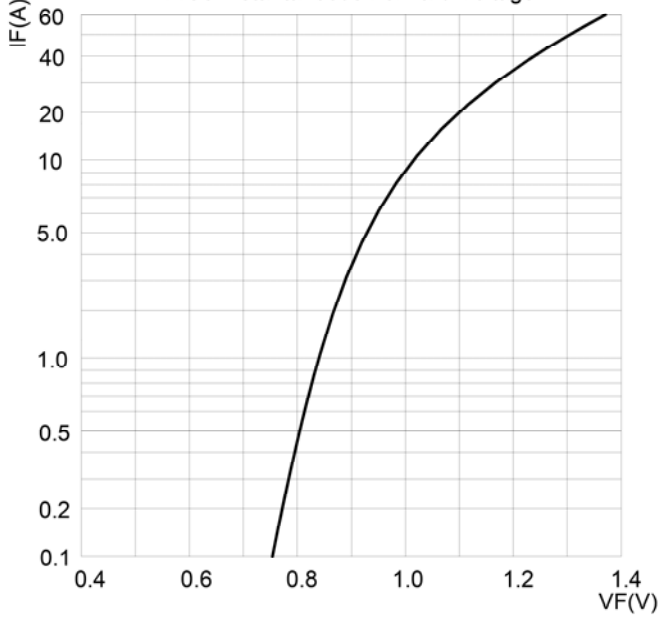


FIG4:Typical Reverse Characteristics

