Kingtronics®

KBL4005 THRU KBL410

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE 50 to 1000 Volts **FORWARD CURRENT** 4.0 Ampere

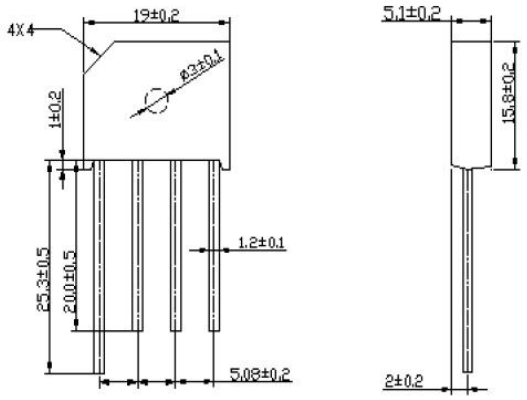
FEATURES

Ideal for printed circuit board mounting
The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
Built-in printed circuit board stand-offs
High case dielectric strength
High temperature soldering guaranteed 260℃ /5 seconds at 5 lbs (2.3kg) tension

MECHANICAL DATA

Case: Reliable low cost construction utilizing molded plastic technique
Terminals: Plated leads solderable per MIL-STD-202, Method 208
Mounting Position: Any

KBL



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.
For Capacitive load derate current by 20%.

PARAMETER	SYMBOL	KBL4005	KBL401	KBL402	KBL404	KBL406	KBL408	KBL410	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current at T_C= 100℃(with heatsink)	$I_{F(AV)}$	4.0							A
Peak Forward Surge Current single sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	135							A
Rating for fusing (t<8.3ms)	I^2t	95							A^2sec
Operating junction and storage temperature	T_J, T_{STG}	-55 to +150							℃

Electrical Characteristics
Rating at 25℃ ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.
For Capacitive load derate by 20 %.

PARAMETER	SYMBOL	KBL4005	KBL401	KBL402	KBL404	KBL406	KBL408	KBL410	UNIT
Maximum instantaneous forward voltage drop per leg at 4.0A	V_F	1.1							V
Maximum Reverse Current at Rated T_A = 25℃ DC Blocking voltage T_A = 125℃	I_R	10 500							uA

Notes: (1)Thermal resistance from Junction to Ambemt on P.C.board mounting.

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RATINGS AND CHARACTERISTIC CURVES

Fig. 1 Derating Curve for Output Rectified Current

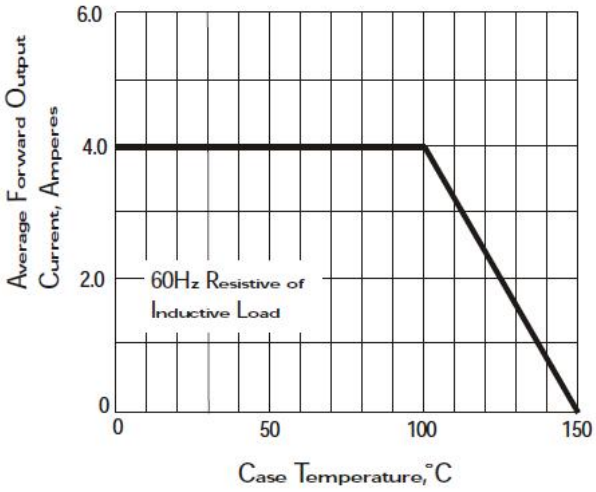


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

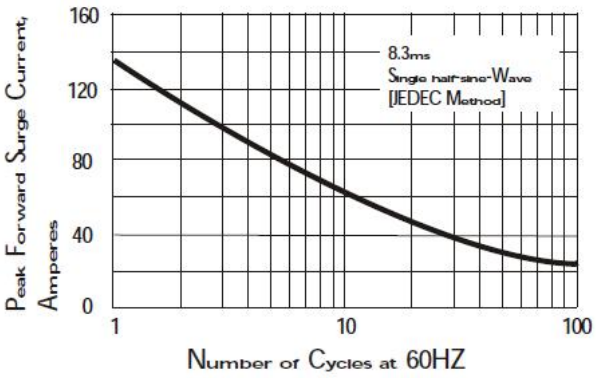


Fig. 3 Typical Instantaneous Forward Characteristics

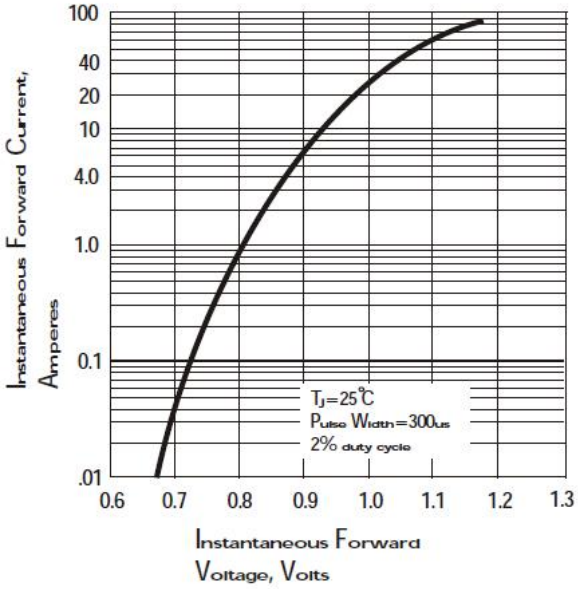
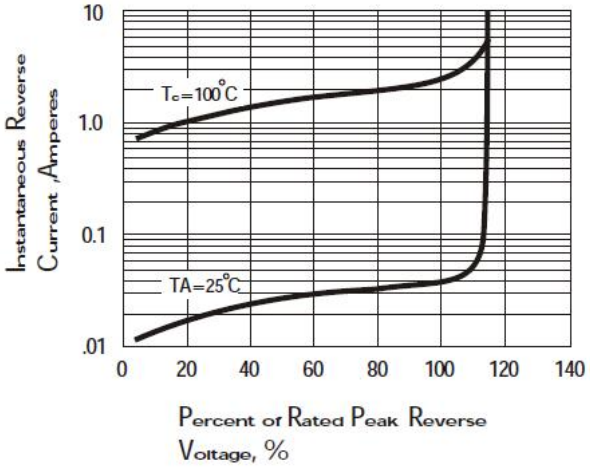


Fig. 4 Typical Reverse Characteristics



Note: Specifications are subject to change without notice.