KBL4005 THRU KBL410

Single Phase 4.0 AMPS. Silicon Bridge Rectifiers

Voltage Range: 50 to 1000 Volts Current: 4.0 Amperes

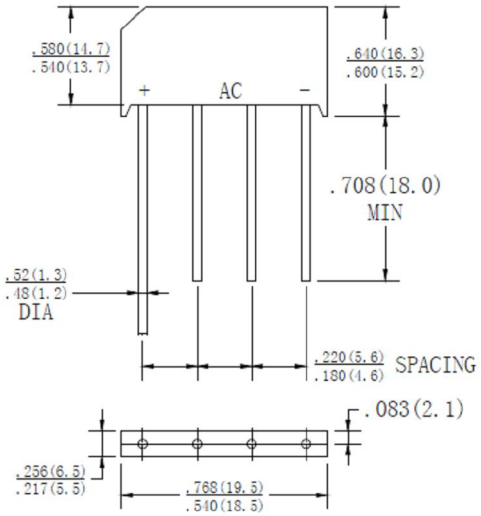
Features

- UL Recognized File # E-230084
- Ideal for printed circuit board
- Reliable low cost construction technique results in inexpensive product
- High temperature soldering guaranteed:
  260℃ / 10 seconds / 0.375" (9.5mm)
  lead length at 5 lbs., (2.3 kg) tension

Mechanical Data

- Case: Molded plastic
- Lead: solder plated
- Polarity: As marked

KBL



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Type Number		KBL 4005	KBL 401	KBL 402	KBL 404	KBL 406	KBL 408	KBL 410	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_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @TA=50°C	I(AV)	4.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	150							A
Maximum Instantaneous Forward Voltage @ 4.0A	V_F	1.1							V
Maximum DC Reverse Current @ TA=25℃ rated DC blocking voltage per leg TA = 125℃	I_R	10 500							μA
Typical Thermal Resistance (Note)	$R_{\theta JA}$ $R_{\theta JL}$	19 2.4							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

NOTE： Thermal Resistance from Junction to Ambient and from Junction to Lead Mounted on P.C.B. with 0.47X0.47"(12X12mm) **Copper Pads**

RATING AND CHARACTERISTIC CURVES

FIG.1-MAXIMUM NONO-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELELMENT

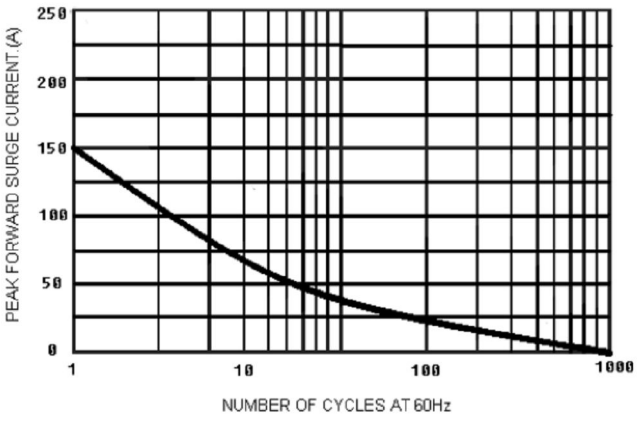
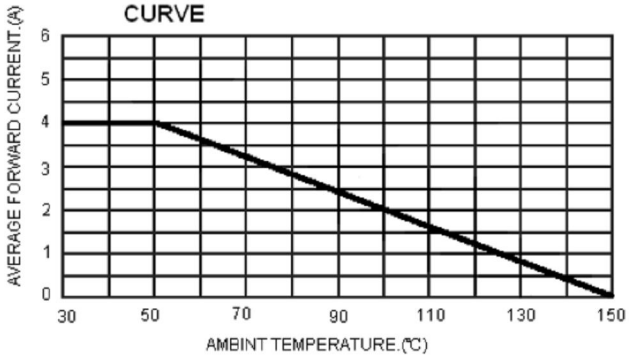


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE



CHARACTERISTICS PER BRIDGE ELEMENT

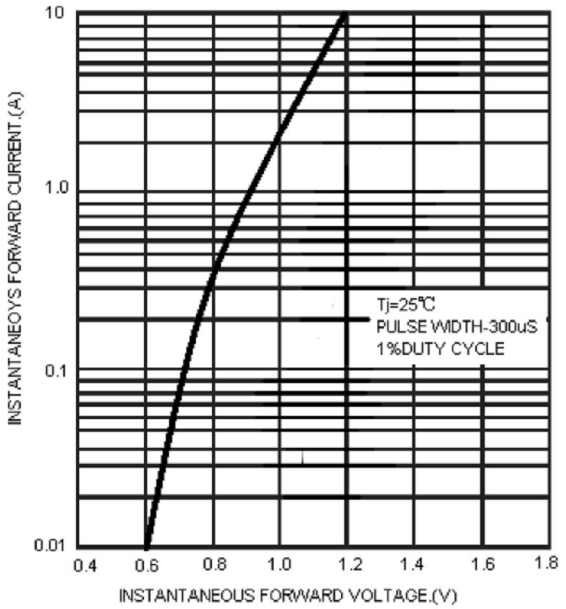


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT