KBJ6005 THRU KBJ610

Single Phase 6.0 AMPS. Silicon Bridge Rectifiers

Voltage Range: 50 to 1000 Volts Current: 6.0 Amperes

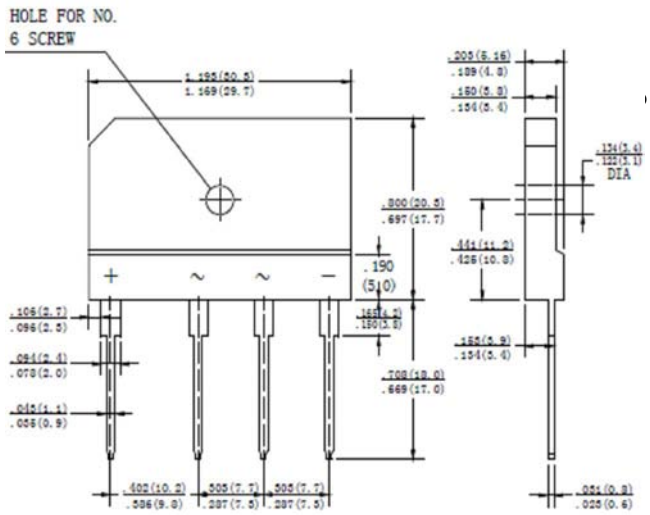
Features

- 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

KBJ-6



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		KBJ 6005	KBJ 601	KBJ 602	KBJ 604	KBJ 606	KBJ 608	KBJ 610	UNITS
Maximum Repetitive Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T_C= 50℃	I(AV)	6.0							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 @ 3.0A	V_F	1.0							V
Maximum DC Reverse Current @ TA=25℃ rated DC blocking voltage per leg TA = 125℃	I_R	5.0 500							μA
Typical Thermal Resistance (Note)	$R_{\theta JC}$	1.8							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

NOTE： Thermal Resistance from Junction to Case with Device Mounted on 75X75X1.6mm Cu Plate Heatsink

RATING AND CHARACTERISTIC CURVES

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

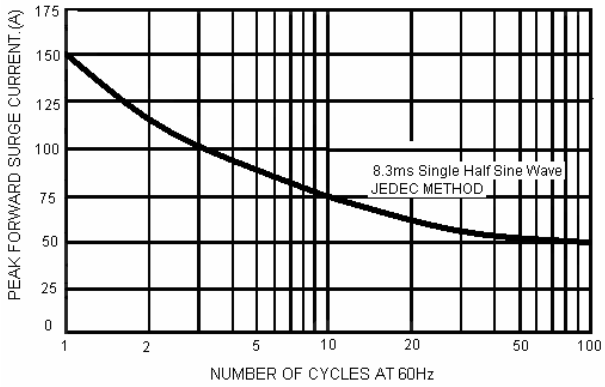


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

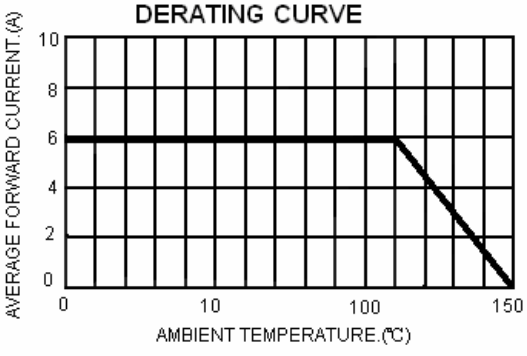


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

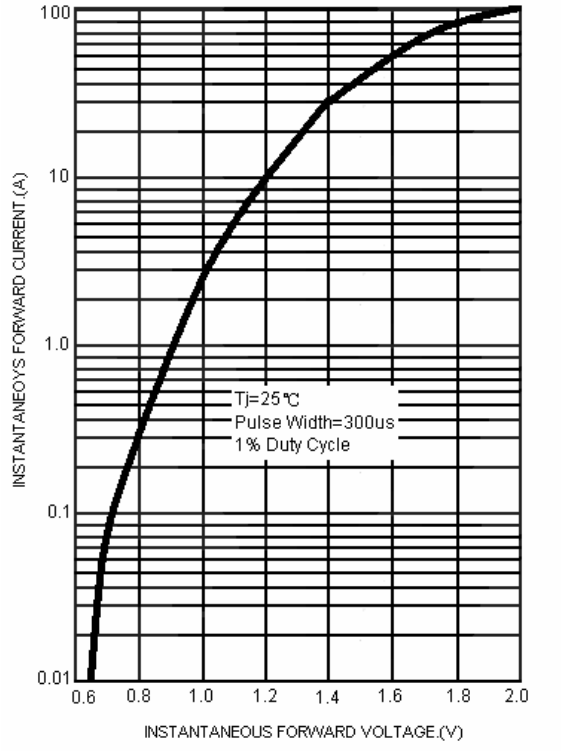


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT