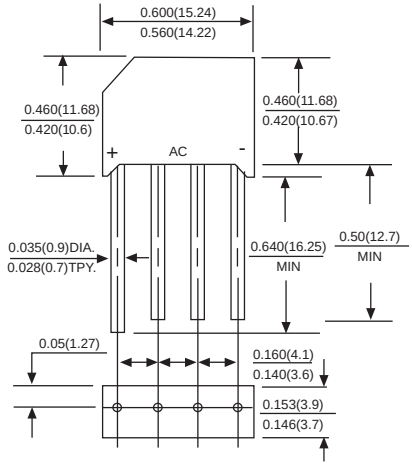
KBP3005 THRU KBP310

SILICON BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 3.0 Amperes

KBP



Dimensions in inches and (millimeters)

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Ideal for printed circuit boards
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
  260ºC/10 seconds,0.375”(9.5mm) lead length,
  5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: Molded plastic body
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
Polarity: Polarity symbols marked on case
Mounting Position: Any
Weight:0.069 ounce, 1.95 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

MDD Catalog Number	SYMBOLS	KBP 3005	KBP 301	KBP 302	KBP 304	KBP 307	KBP 308	KBP 310	UNITS
Maximum repetitive 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 rectified current at Tc=50℃	$I_{(AV)}$	3.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	80							Amps
Maximum instantaneous forward voltage drop per birdge element at 1.5A	V_F	1.0							Volts
Maximum DC reverse current at rated DC blocking voltage TA=25℃	I_R	10							µA
TA=125℃		0.5							mA
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	30							°C/W
Operating junction temperature range	T_J	-55 to +150							°C
storage temperature range	T_{STG}	-55 to +150							°C

NOTES: 1.Unit mounted on 0.47 x 0.47 (12x12mm) copper pads.

RATINGS AND CHARACTERISTIC CURVES KBP3005 THRU KBP310

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

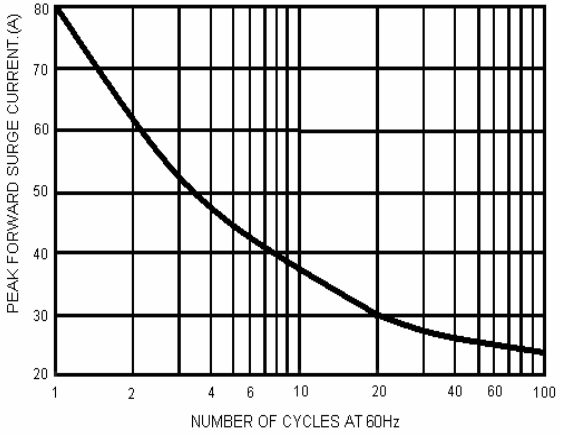


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

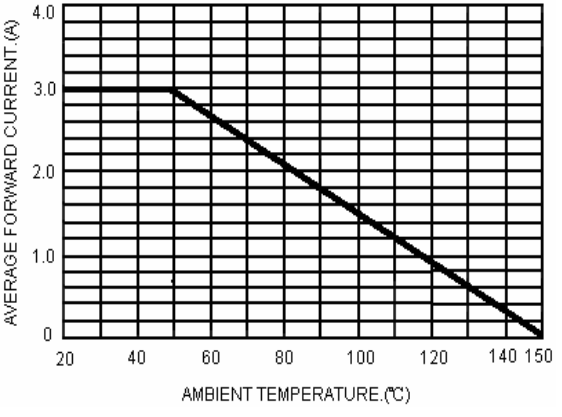


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

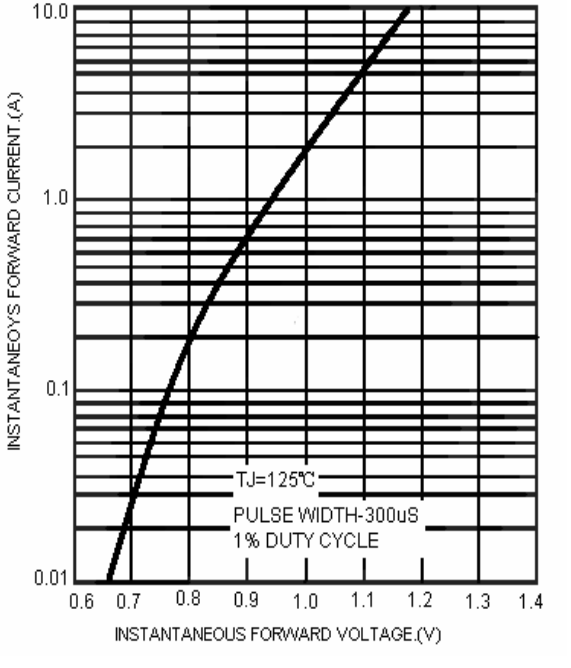
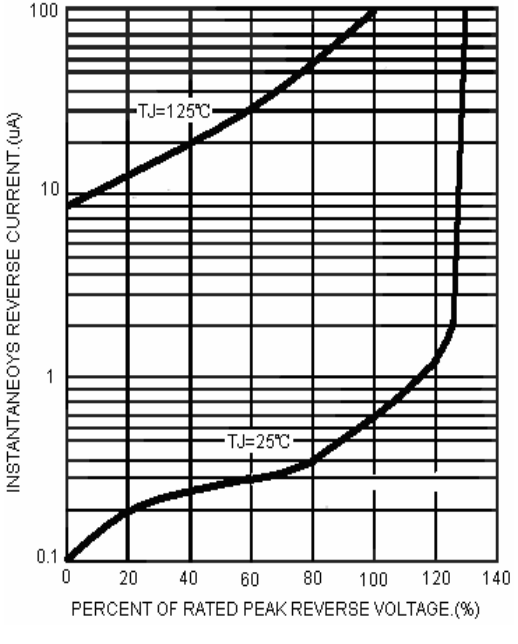


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!