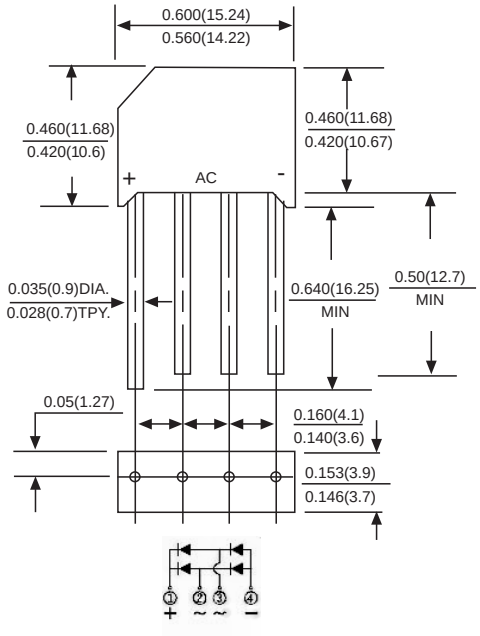
SILICON BRIDGE RECTIFIERS

Features

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

KBP



Dimensions in inches and (millimeters)

Mechanical Data

Case : KBP Molded plastic body
Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
Polarity : Polarity symbol marking on body
Mounting Position : Any
Weight : 0.069 ounce, 1.95 grams

Maximum Ratings And Electrical Characteristics

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

Parameter	SYMBOLS	KBP3005	KBP301	KBP302	KBP304	KBP306	KBP308	KBP310	UNITS
Marking Code									
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 output rectified current at Tc=50 C(Note 2)	$I_{(AV)}$	3.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	80.0							A
Maximum instantaneous forward voltage drop per birdge element at 3A	V_F	1.0							V
Maximum DC reverse current T_A=25°C	I_R	10							μA
at rated DC blocking voltage T_A=100°C		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

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

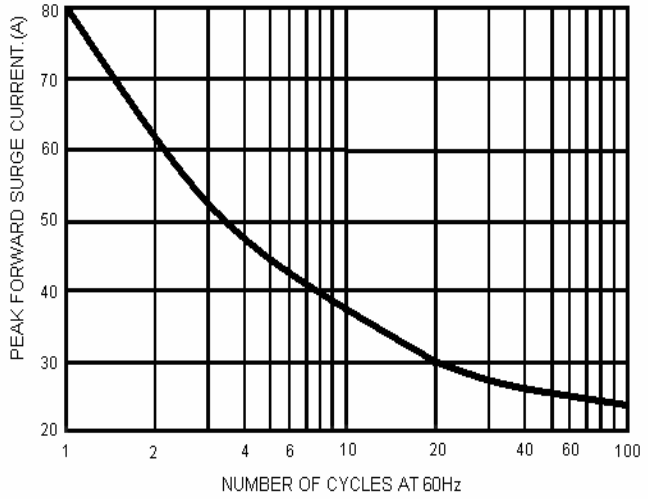


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

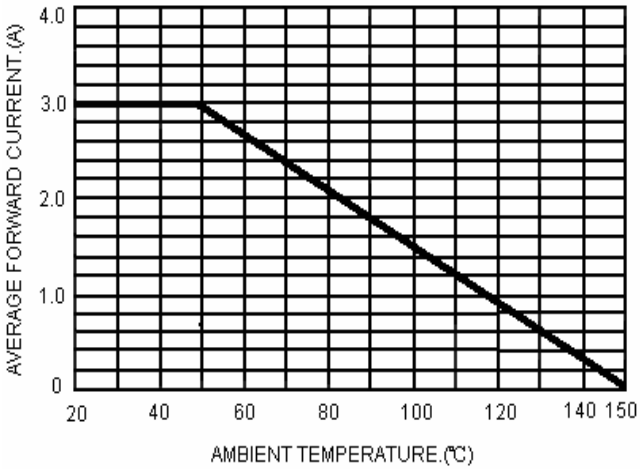


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

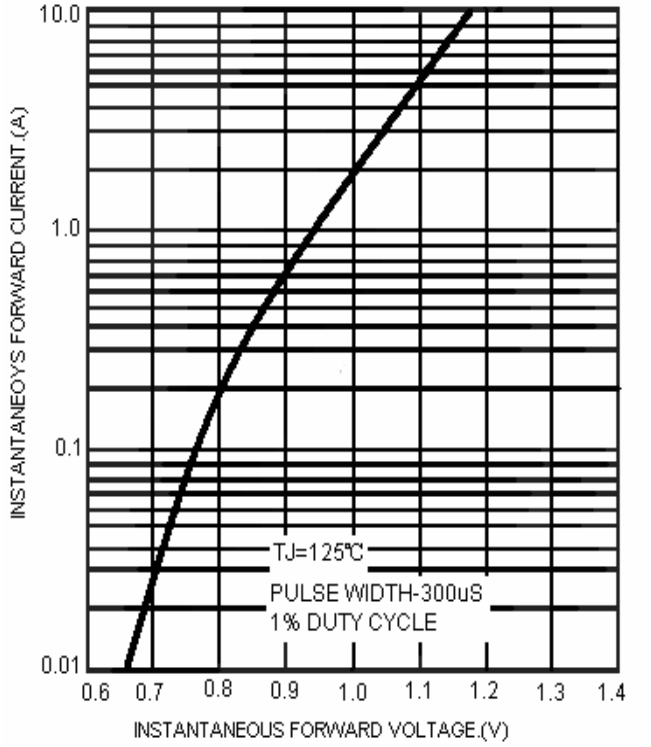


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT