KBP005 thru KBP10

1.0A Single-Phase GLass Passivated Bridge Rectifiers

Recifiter Reverse Voltage 50V to 1000V

GBP

Features

● Glass passivated junction
● The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
● Suge overload ratings to 50 amperes peak
● Ideal for printed circuit board application
● High temperature soldering guaranteed 265℃/10
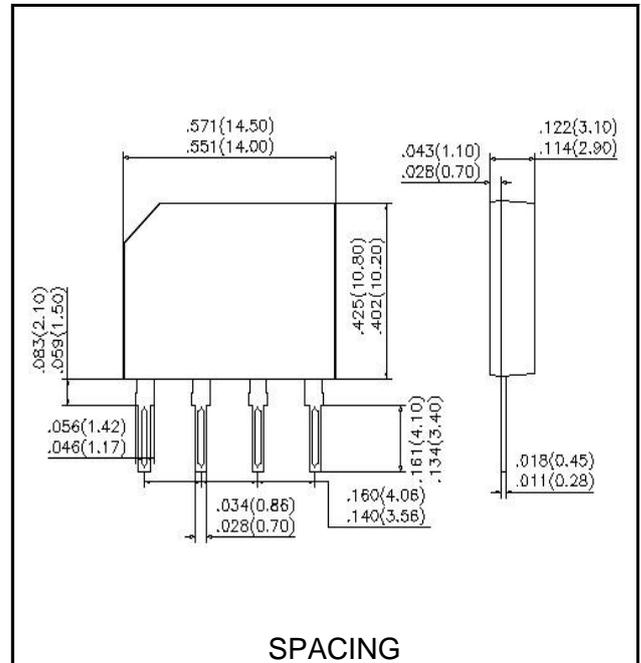
Mechanical Data

Case:Molded plastic
Terminals:Platde leads solderable per MIL-STD-750, Method 2026
Polarity:Polarity symbols molded or Marked on body
Mounting Position:Any
Weight:0.05ounce,1.42 grams(approx)

SPACING

Maximum Ratings & Thermal Characteristics

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

Parameter	Symbol	KBP 005	KBP 01	KBP 02	KBP 04	KBP 06	KBP 08	KBP 10	unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input 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 output current at TA=40℃	IF(AV)	1.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	50							A
Operating temperature range	TJ,	-55to+150							℃
Storage temperature range	TSTG	-55to+150							℃

Electrical Characteristics

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

Parameter	Symbol	KBP 005	KBP 01	KBP 02	KBP 04	KBP 06	KBP 08	KBP 10	unit
Maximum instantaneous forward voltage drop per leg at 1.0A	VF	1.1							V
Maximum DC reverse current at ratde TA=25℃ DC blocking voltage per element TA=125℃	IR	5 500							UA

Rating and Characteristic Curves(TA=25℃ Uniless otherwise noted)

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

SINGLE PHASE HALF WAVE 60Hz
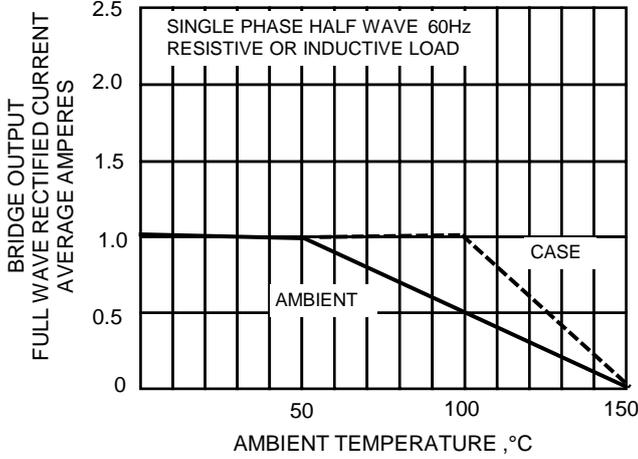RESISTIVE OR INDUCTIVE LOAD

BRIDGE OUTPUT FULL WAVE RECTIFIED CURRENT AVERAGE AMPERES

CASE

AMBIENT

AMBIENT TEMPERATURE ,℃

FIG.2-MAXIMUM NON-REPETITIVE SUNRGE CURRENT

Peak Forward Surge Current Amperes

PULSE WIDTH 8.3ms
SINGLE HALF-SINE-WAVE
(JEDEC METHOD)

NUMBER OF CYCLES AT 60Hz
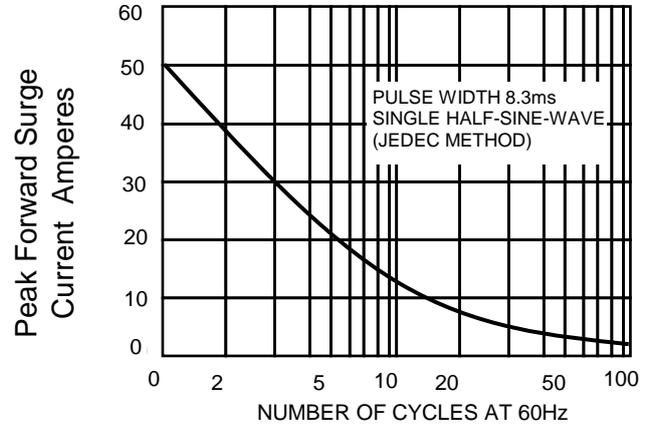
FIG.3-TYPICAL JUNCTION CAPACITANCE

CAPACITANCE,(pF)

TJ=25℃,f=1MHz

REVERSE VOLTAGE,(VOLTS)
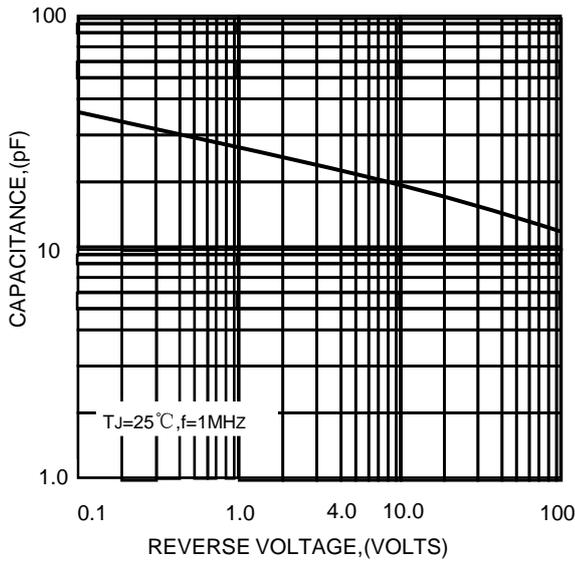
FIG.4-TYPICAL FORWARD CHARACTERISTICS

INSTANTANEOUS FORWARD CURRENT, (A)
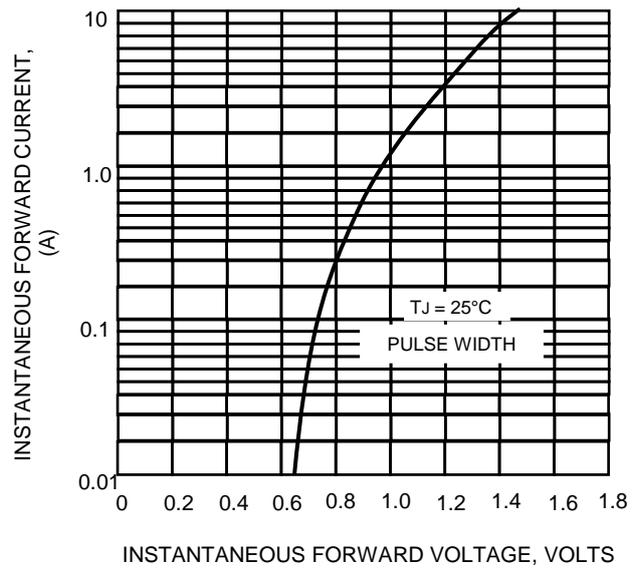
TJ = 25℃

PULSE WIDTH

INSTANTANEOUS FORWARD VOLTAGE, VOLTS

FIG.5-TYPICAL REVERSE CHARACTERISTICS

INSTANTANCEOUS REVERSE CURRENT, (u A)

TJ=150

TJ=125

TJ=100

TJ=25°

PERCENT OF RATED PEAK REVERSE VOLTAGE,(%)