

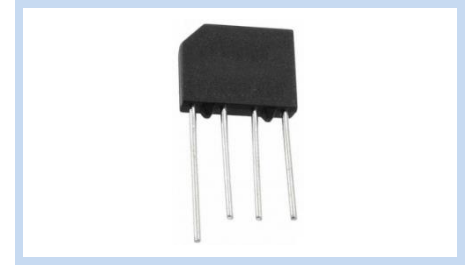
Single-phase Silicon Bridge Rectifier – KBP Package

KBP30XG Serie

MERITEK

FEATURE

- Glass passivated
- Surge overload rating: 80 amperes peak
- Reserve Voltage from 50 to 1000V
- Forward Current: 3.0 A
- Epoxy: UL 94V-0 rate flame retardant
- Terminals: Leads solderable per MIL-STD-202, method 208 guaranteed
- UL/cUL safety approved: certification No: E223027



ELECTRICAL CHARACTERISTICS

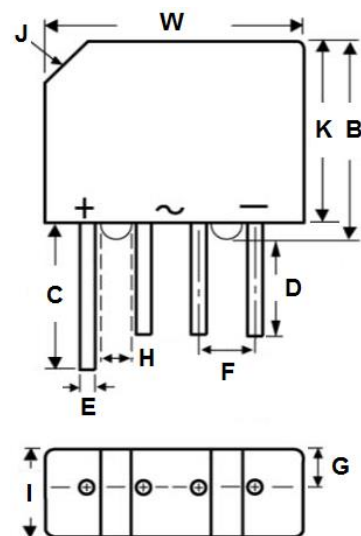


Parameter	Symbols	KBP 3005G	KBP 301G	KBP 302G	KBP 304G	KBP 306G	KBP 308G	KBP 310G	Unit
Maximum Recerrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at $T_A=50^{\circ}C$ (With Heatsink Note 1)	$I_{(AV)}$	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 Forward Voltage at 3.0A DC and $25^{\circ}C$	V_F	1.1							V
Maximum Reverse Current at Rated DC Blocking Voltage	I_R	10.0, at $T_A=25^{\circ}C$, 500, at $T_A=100^{\circ}C$							μA
Typical Junction Capacitance applied reverse voltage of 4.0 VDC at 1 MHz and	C_J	25							pF
Typical Thermal Resistance, thermal Resistance Junction to Ambient and form junction to lead at 0.375"(9.5mm) lead length P.C.B. Mounted.	$R_{\theta JA}$	30							$^{\circ}C$
	$R_{\theta JL}$	11							$^{\circ}C/W$
Operating and Storage Temperature Range	T_J, T_{stg}	-55 to +150							$^{\circ}C$

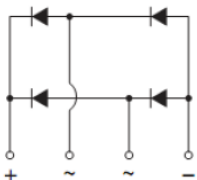
Rating at $25^{\circ}C$, ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

DIEMSIONS

Item	Milimeters		Item	Milimeters	
	Min.	Max.		Min.	Max.
W	14.22	15.24	F	3.6	4.1
K	10.67	11.68	G	0.90	1.40
B	11.68	12.70	H	1.52	-
C	15.2	-	I	3.35	4.20
D	12.7	-	J	3.2x45°	-
E	0.76	0.86			



FUNCTIONAL DIAGRAM



Single-phase Silicon Bridge Rectifier – KBP Package

KBP30XG Serie

MERITEK

CHARACTERISTICS CURVES

Fig.1 Maximum Non-Repetitive Forward Surge Current

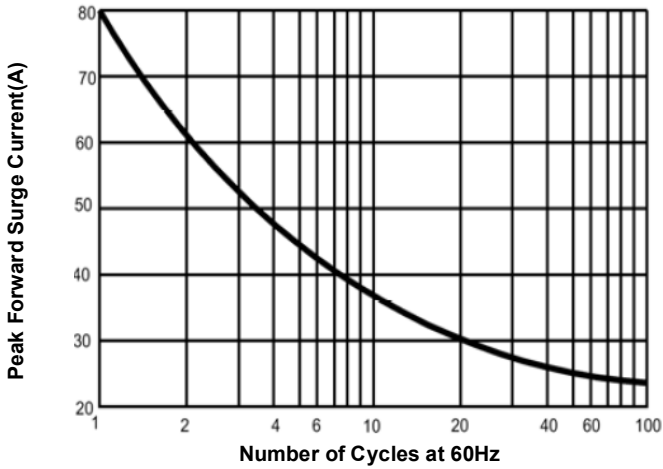


Fig 2. Maximum Non-Repetitive Surge Current Per Leg

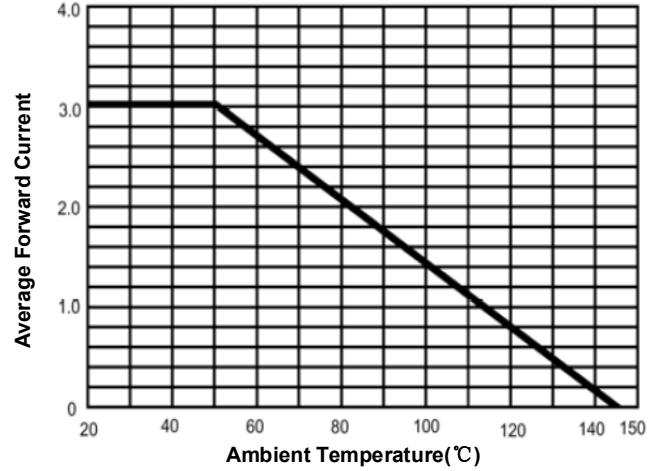


Fig 3. Typical Instantaneous Forward Characteristics per Bridge Element

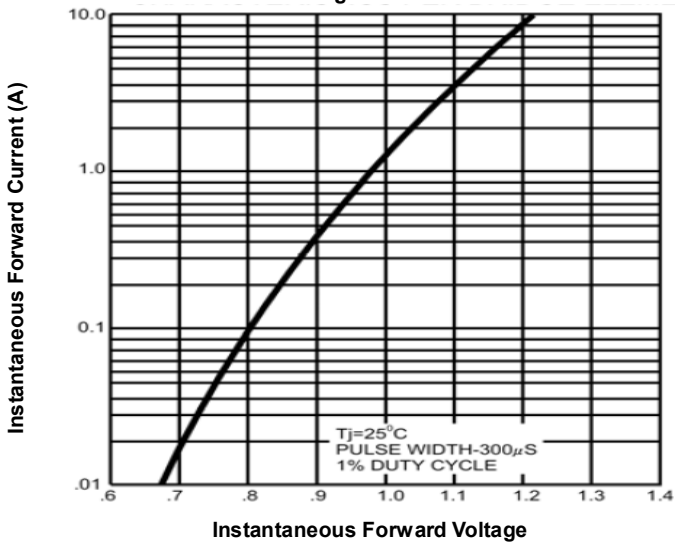


Fig 4. Typical Reverse Characteristics Per leg

