

**DESCRIPTION**

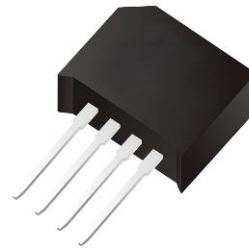
The KBP301~KBP310 is available in KBP package.

FEATURE

- High Current Capability
- Low Forward Voltage Drops
- Glass Passivated Chip Junction
- Low Power Loss, High Efficiency

MECHANICAL DATA

- Case: KBP
- Terminals: Solderable per MIL-STD-202, Method 208
- Approx. Weight: 1.52mg/0.05oz

PIN DESCRIPTION

KBP

ORDERING INFORMATION

Package Type	Part Number
KBP	KBP301
	KBP302
	KBP304
	KBP306
	KBP308
	KBP310
Note	SPQ: 500pcs/Reel
AiT provides all RoHS Compliant Products	

PIN#	DESCRIPTION
1	OUTPUT ANODE (+)
2	INPUT PIN (~)
3	INPUT PIN (~)
4	OUTPUT CATHODE (-)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter		Symbol	KBP301	KBP302	KBP304	KBP306	KBP308	KBP310	Unit
Maximum Repetitive Peak Reverse Voltage		V _{RRM}	100	200	400	600	800	1000	V
Maximum RMS Voltage		V _{RWS}	14	28	42	56	70	700	V
Maximum DC Blocking Voltage		V _{DC}	100	200	400	600	800	1000	V
Average Rectified Output Current		I _(AV)	3						A
Peak Forward Surge Current 8.3ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)		I _{FSM}	80						A
Peak Forward Surge Current @ T _j = 25 °C 1.0ms single half sine-wave		I _{FSM}	110						
Maximum Instantaneous Forward Voltage at 2A		V _F	1.10						V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _J =25°C	I _R	5						mA
	T _J =125°C		500						
I ² t Rating for Fusing (3ms≤t≤8.3ms)		I ² t	17.50						pF
Typical Junction Capacitance		C _J	60						pF
Typical Thermal Capacitance		R _{θJA}	30						°C/W
Typical Thermal Capacitance		R _{θJC}	10						°C
Operating Temperature Range		T _J	-55 ~ + 150						°C
Storage Temperature Range		T _{STG}	-55 ~ + 150						°C



TYPICAL PERFORMANCE CHARACTERISTICS

Fig 1. Forward Current Derating Curve

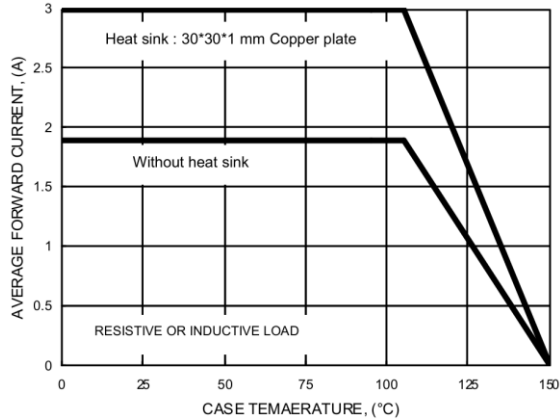


Fig 2. Maximum Non-Repetitive Surge Current

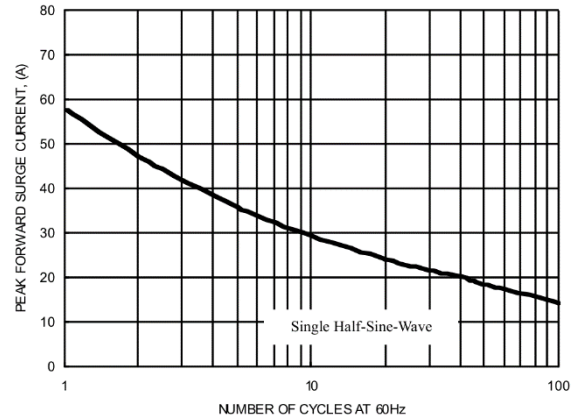


Fig 3. Typical Junction Capacitance

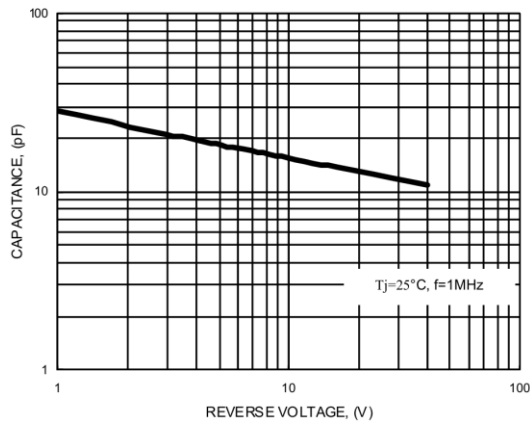


Fig 4. Typical Forward Characteristics

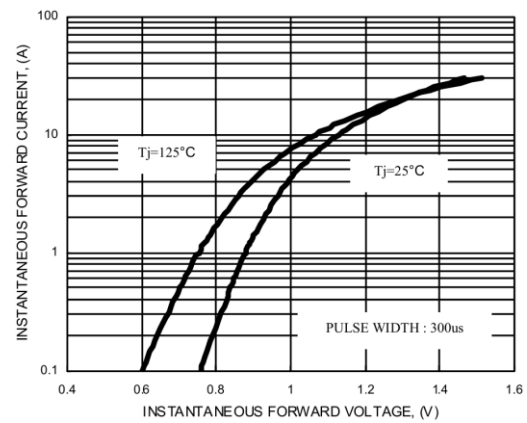
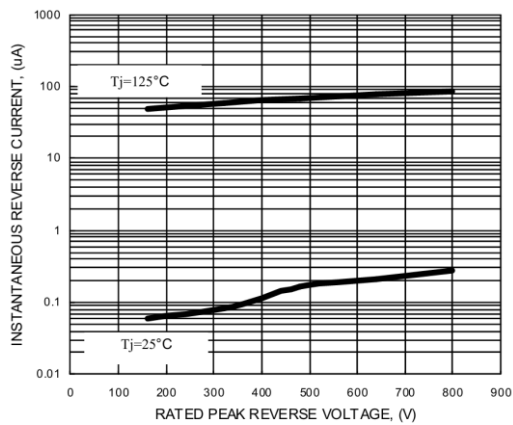


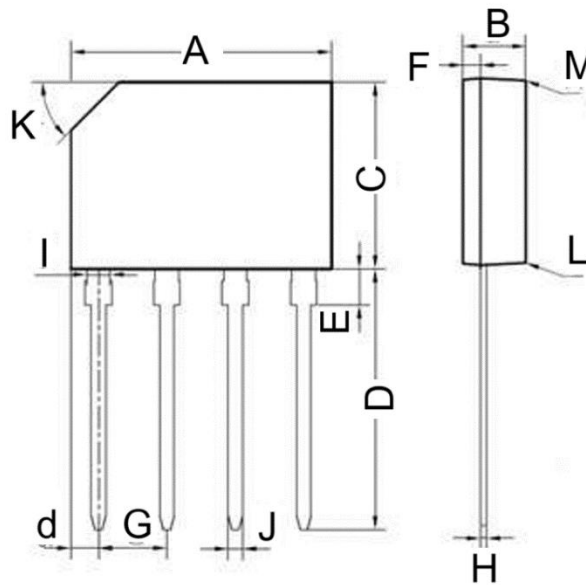
Fig 5. Typical Reverse Characteristics





PACKAGE INFORMATION

Dimension in KBP (Unit: mm)



DIM	MILLIMETERS	
	MIN	MAX
A	14.300	14.600
B	3.000	3.300
c	10.450	10.750
D	14.410	14.710
d	1.400	1.700
E	2.000	2.300
F	0.900	1.200
G	3.500	3.800
H	0.350	3.800
I	1.430	1.450
J	0.800	0.830
K	2.7×45°(Typ.)	
L	-	3°
M	-	2°
∠	10°	

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