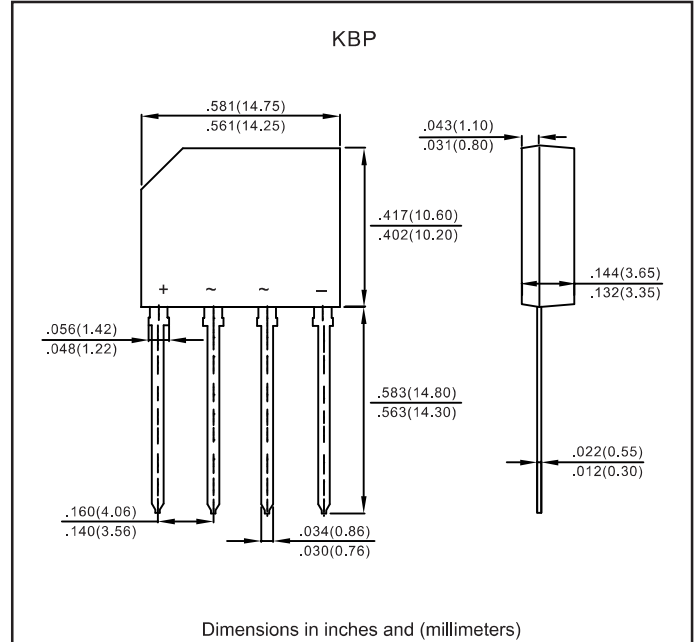


Features

- Surge overload ratings to 80 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction technique
- Lead-free parts for green partner, meet RoHS requirements
- Suffix "-H" indicates Halogen free parts, ex. KBP3005 -H.

Package outline



Mechanical data

- Case: Potted plastic round body KBP
- Epoxy: UL94-V0 rated flame retardant
- Terminals: Solderable per MIL-STD-750 Method 2026
- Polarity: As marked
- Mounting Position: Any

Maximum ratings and Electrical Characteristics (AT $T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.1	I_O			3.0	A
Forward surge current	8.3ms single half sine-wave (JEDEC methode)	I_{FSM}			80	A
Reverse current	$V_R = V_{RRM} T_J = 25^\circ\text{C}$	I_R			5.0	uA
	$V_R = V_{RRM} T_J = 125^\circ\text{C}$				500	
I^2t Rating for fusing	$t < 8.3$ ms	I^2t			27	A^2s
Storage temperature		T_{STG}	-65		+175	$^\circ\text{C}$

SYMBOLS	V_{RRM}^{*1} (V)	V_{RMS}^{*2} (V)	V_R^{*3} (V)	V_F^{*4} (V)	Operating temperature T_J , ($^\circ\text{C}$)
KBP3005	50	35	50	1.0	-55 to +150
KBP301	100	70	100		
KBP302	200	140	200		
KBP304	400	280	400		
KBP306	600	420	600		
KBP308	800	560	800		
KBP310	1000	700	1000		

*1 Repetitive peak reverse voltage

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage @ $I_F=3.0\text{A}$

Rating and characteristic curves (KBP3005 THRU KBP310)

FIG.1-DERATING CURVE
OUTPUT RECTIFIED CURRENT

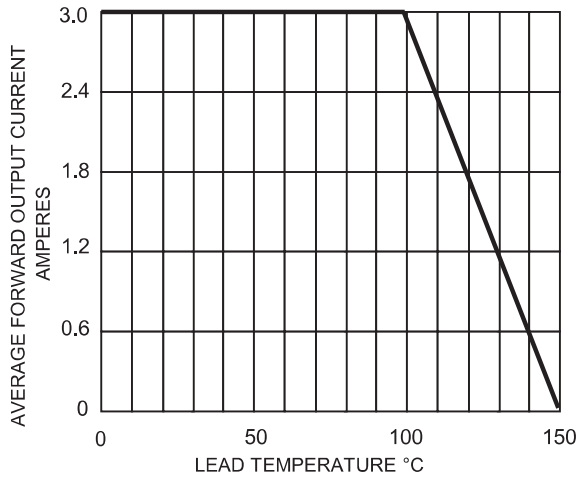


FIG.2-TYPICAL FORWARD CHARACTERISTICS

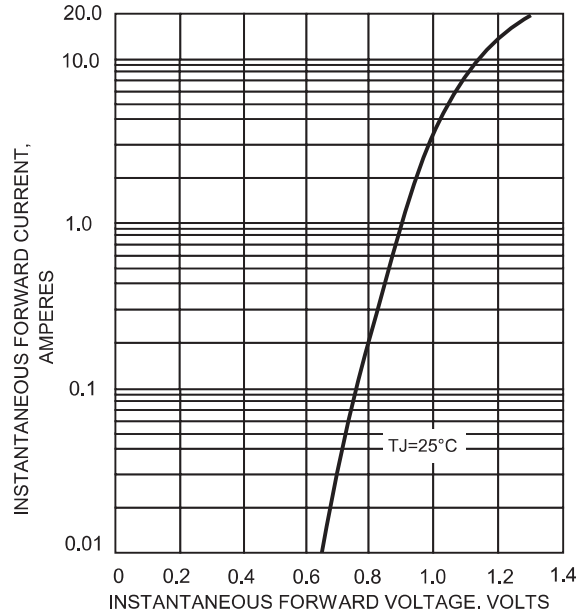


FIG.3-TYPICAL REVERSE CHARACTERISTICS

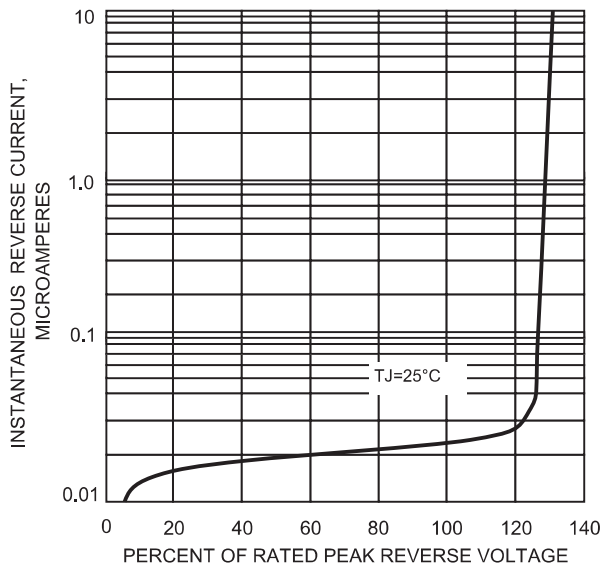
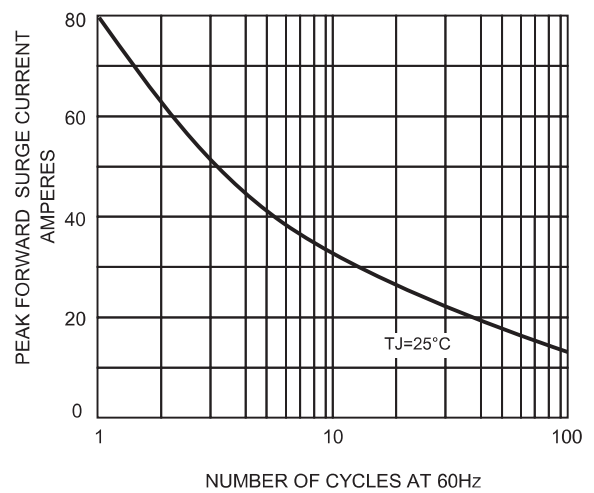
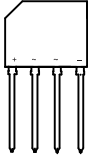
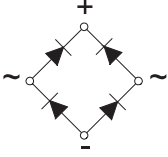


FIG.4-MAXIMUM FORWARD SURGE CURRENT



Pinning information

Simplified outline	Symbol
	

Marking

Type number	Marking code
KBP3005	KBP3005
KBP301	KBP301
KBP302	KBP302
KBP304	KBP304
KBP306	KBP306
KBP308	KBP308
KBP310	KBP310