

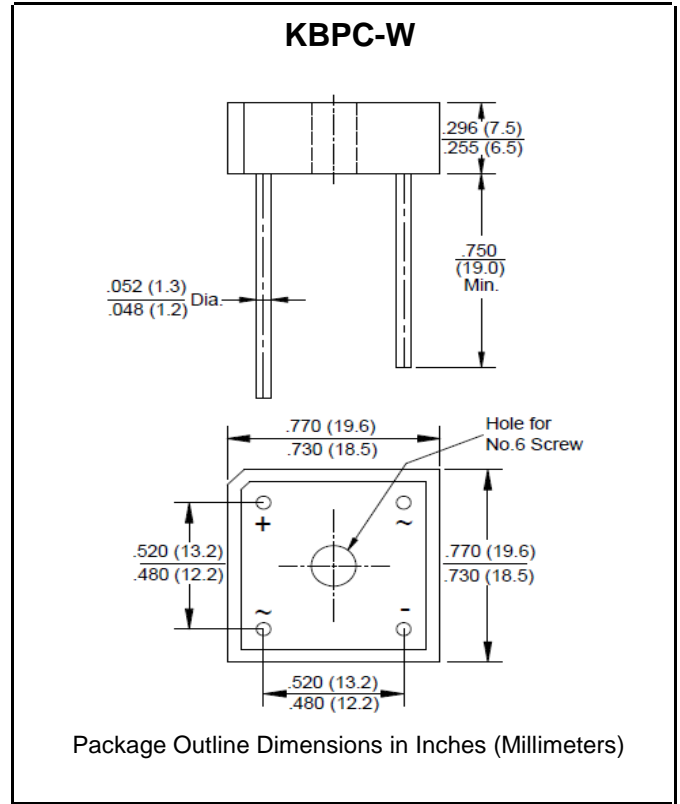
Features

- Low forward voltage drop
- Small size; simple installation
- Lead tin plated copper

Mechanical data

- Epoxy: UL94-V0 rated flame retardant
- Case : Molded plastic, KBPC-W
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : marked on body
- Mounting Position : Any

Package outline



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	$I_{F(AV)}$			10	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	I_{FSM}			240	A
I^2t Rating for Fusing ($t < 8.3\text{ms}$)		I^2t			239	A^2s
Reverse current	$V_R = V_{RRM} \quad T_J = 25^{\circ}\text{C}$	I_R			5.0	μA
	$V_R = V_{RRM} \quad T_J = 100^{\circ}\text{C}$				1000	
Operating temperature range		T_J	-55		+150	$^{\circ}\text{C}$
Storage temperature		T_{STG}	-55		+150	$^{\circ}\text{C}$

SYMBOLS	V_{RRM}^{*1} (V)	V_{RMS}^{*2} (V)	V_R^{*3} (V)	V_F^{*4} (V)	Operating temperature $T_J, (^{\circ}\text{C})$
KBPC1005W	50	35	50	1.0	-55 to +150
KBPC1001W	100	70	100		
KBPC1002W	200	140	200		
KBPC1004W	400	280	400		
KBPC1006W	600	420	600		
KBPC1008W	800	560	800		
KBPC1010W	1000	700	1000		

*1 Repetitive peak reverse voltage

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage per diode @ $I_F = 5.0\text{A}$

Rating and characteristic curves

Fig. 1 - Forward Current Derating Curve

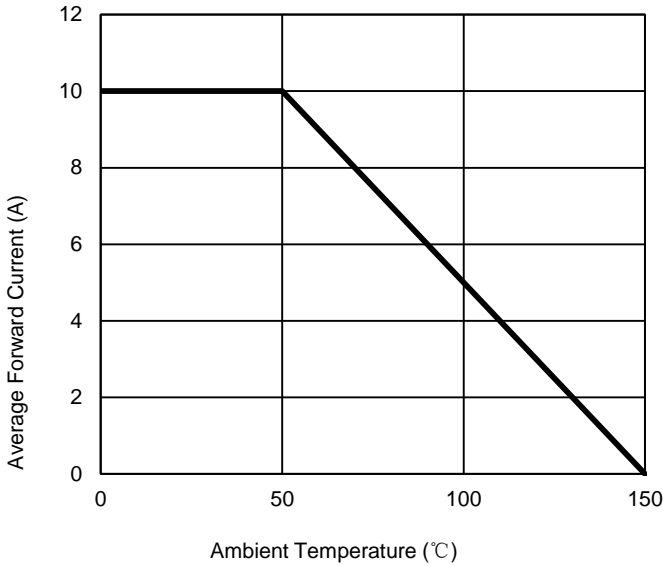


Fig. 2 - Maximum Non-Repetitive Surge Current

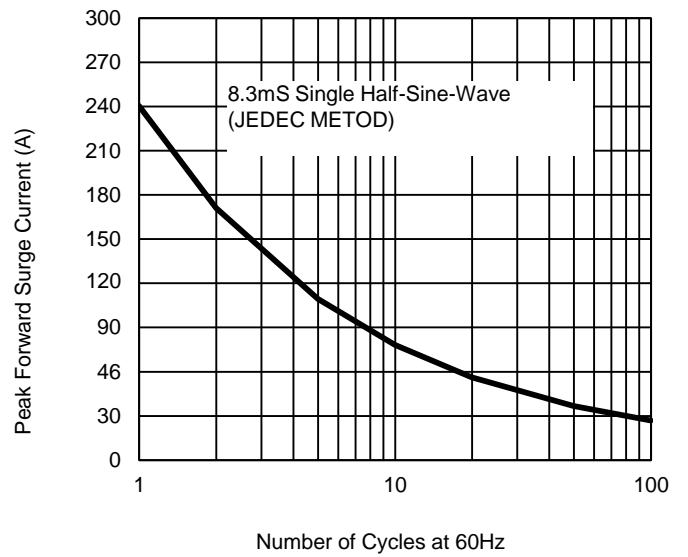


Fig. 3 - Typical Reverse Characteristics

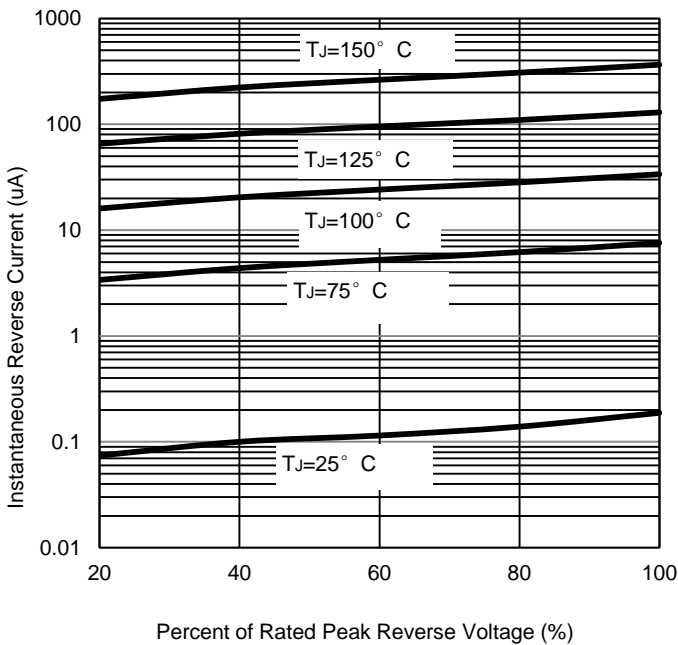
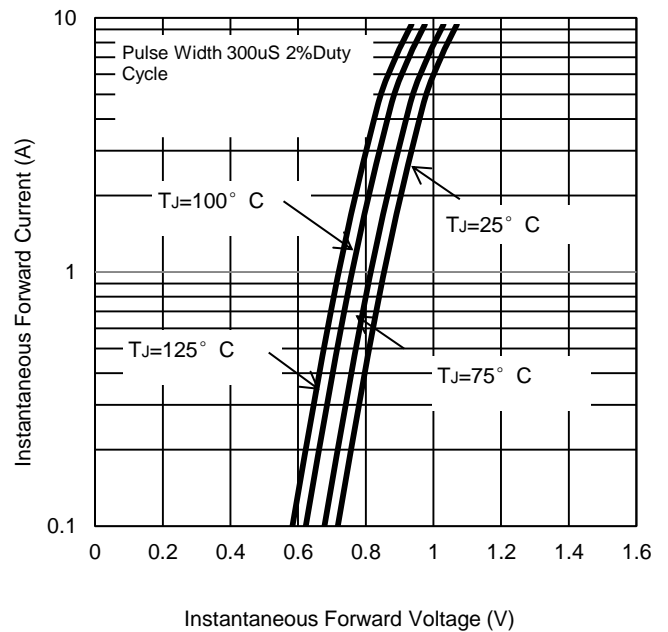
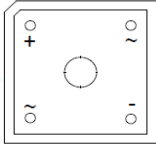
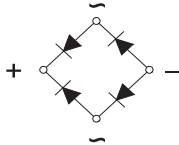


Fig. 4 - Typical Forward Characteristics



Pinning information

Simplified outline	Symbol
	

Marking

Type number	Marking code
KBPC10005W	KBPC10005W
KBPC1001W	KBPC1001W
KBPC1002W	KBPC1002W
KBPC1004W	KBPC1004W
KBPC1006W	KBPC1006W
KBPC1008W	KBPC1008W
KBPC1010W	KBPC1010W