KBPC10005 THRU KBPC1010

10 A Glass Passivated Single Phase Bridge Rectifiers-50-1000V

Features

- Low forward voltage drop Small size;simple
- Electrically isolated base -2000 Volts
- High surge forward current capability

Applications

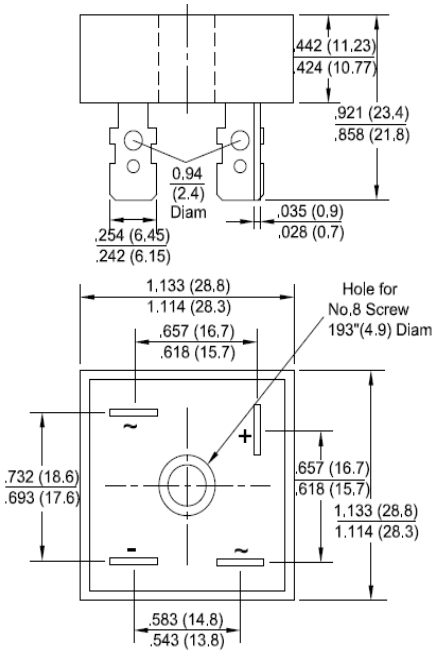
- AC/DC bridge full wave rectification
- Power supply

Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, KBPC
- Polarity : marked on body
- Mounting Position : Any

Package outline

KBPC



Package Outline Dimensions in Inches (Millimeters)

Maximum ratings and Electrical Characteristics (AT T_A=25°C unless otherwise noted)

Rating at 25℃ ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.For capacitive load, derate current by 20%.

PARAMETER	CONDITIONS	SYMBOL	MIN.	TYP.	MAX.	UNIT
Forward rectified current	@Tc=55℃	$I_{F(AV)}$			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<8.3mS)		I^2t			240	A^2s
Reverse current	DC Blocking Voltage per Diode@T_J=25℃	I_R			10	μA
Operating Junction temperature		T_J	-55		+150	°C
Storage temperature		T_{STG}	-55		+150	°C

SYMBOLS	V_{RRM} *1 (V)	V_{RMS} *2 (V)	V_R *3 (V)	V_F *4 (V)	Operating temperature T_J, (°C)
KBPC10005	50	35	50	1.1	-55 to +150
KBPC1001	100	70	100		
KBPC1002	200	140	200		
KBPC1004	400	280	400		
KBPC1006	600	420	600		
KBPC1008	800	560	800		
KBPC1010	1000	700	1000		

*1 Repetitive peak reverse voltage

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage per diode @I_F= 5.0A

Rating and characteristic curves

Fig. 1 - Forward Current Derating Curve

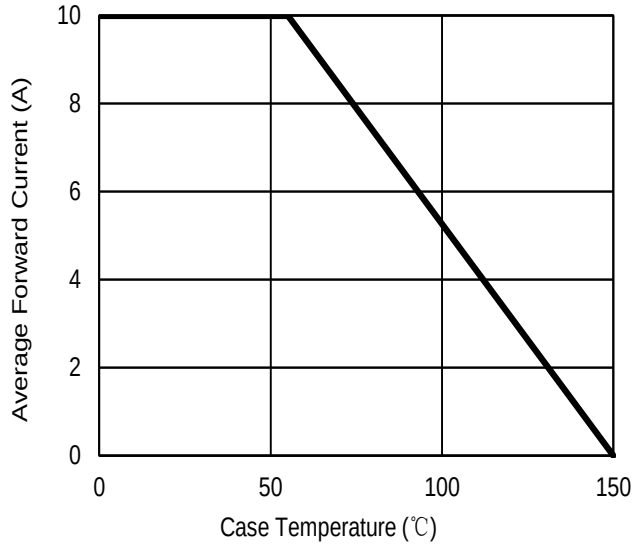


Fig. 2 - Maximum Non-Repetitive Surge Current

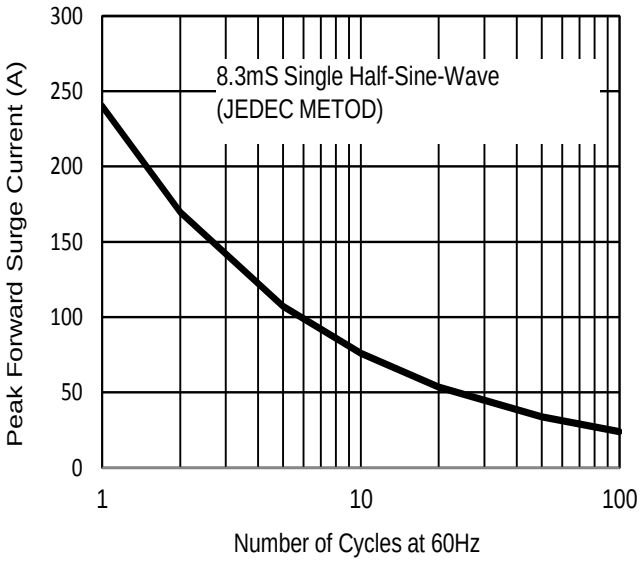


Fig. 3 - Typical Reverse Characteristics

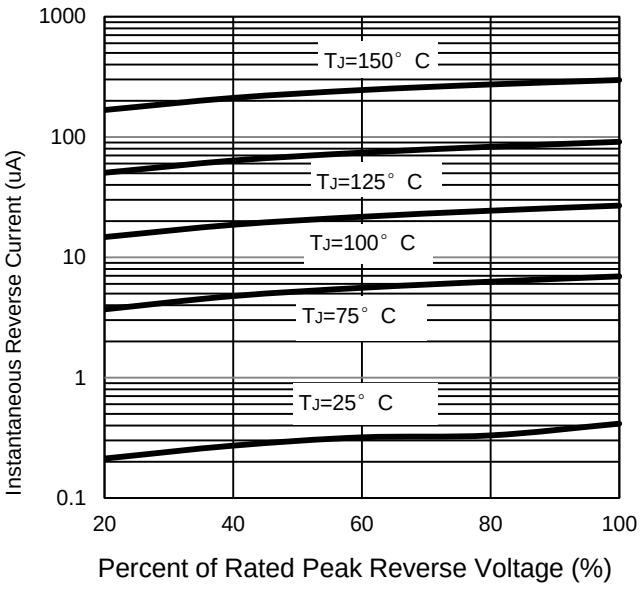
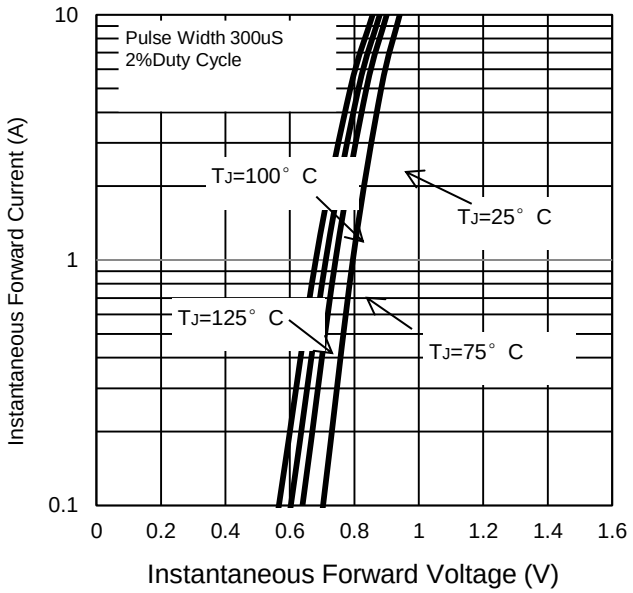


Fig. 4 - Typical Forward Characteristics

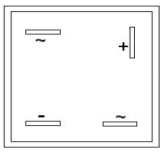
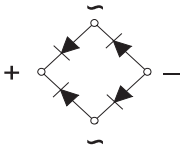


Document ID	Issued Date	Revised Date	Revision	Page.
AS-3050140	2015/09/08	2026/03/06	B	3

KBPC10005 THRU KBPC1010

10 A Glass Passivated Single Phase Bridge Rectifiers-50-1000V

Pinning information

Simplified outline	Symbol
	

Marking

Type number	Marking code
KBPC10005	KBPC10005
KBPC1001	KBPC1001
KBPC1002	KBPC1002
KBPC1004	KBPC1004
KBPC1006	KBPC1006
KBPC1008	KBPC1008
KBPC1010	KBPC1010