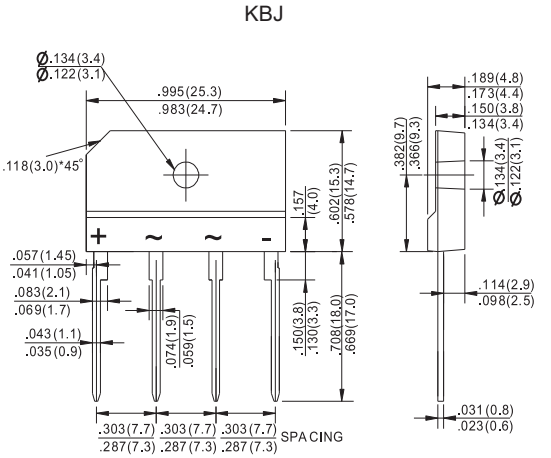
KBJ4005 THRU KBJ410

4.0A Glass Passivated Single Phase Bridge Rectifiers - 50 - 1000V

Features

- Rating to 1000V PRV.
- Ideal for printed circuit board.
- Low forward voltage drop,high current capability.
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product.
- Glass passivated chip junction.
- Lead-free parts meet RoHS requirments.
- Suffix "-H" indicates Halogen free parts, ex.KBJ410-H.

Package outline



Mechanical data

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

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

PARAMETER	CONDITIONS	SYMBOL	MIN.	TYP.	MAX.	UNIT
Maximum average forward rectified current	with heatsink Note 1	$I_{F(AV)}$			4.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	I_{FSM}			125	A
Reverse current	V_R = V_{RRM} T_J = 25°C	I_R			5.0	μA
	V_R = V_{RRM} T_J = 125°C				500	
Rating for fusing	t < 8.3 ms	I^2t			93	A^2s
Typical Junction capacitance Per Element	Measured at 1.0MHz and applied reverse voltage of 4.0V DC	C_J		55		pF
Typical thermal resistance	Junction to case	$R_{\theta JC}$		1.8		°C/W
Storage temperature		T_{STG}	-65		+175	°C

Note: 1.Device mounted on 75mm*75mm*1.6mm Cu plate heatsink.

SYMBOLS	V_{RRM} *1 (V)	V_{RMS} *2 (V)	V_R *3 (V)	V_F *4 (V)	Operating temperature T_J, (°C)
KBJ4005	50	35	50	1.0	-55 to +150
KBJ401	100	70	100		
KBJ402	200	140	200		
KBJ404	400	280	400		
KBJ406	600	420	600		
KBJ408	800	560	800		
KBJ410	1000	700	1000		

*1 Repetitive peak reverse voltage

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage @I_F=2.0Adc

http://www.anbonsemi.com
TEL:+86-755-23776891
FAX:+86-755-81482182

Document ID	Issued Date	Revised Date	Revision	Page.
AS-3050027	2015/09/08	2023/09/06	E	3

KBJ4005 THRU KBJ410

4.0A Glass Passivated Single Phase Bridge Rectifiers - 50 - 1000V

Rating and characteristic curves (KBJ4005 thru KBJ410)

FIG.1 - FORWARD CURRENT DERATING CURVE

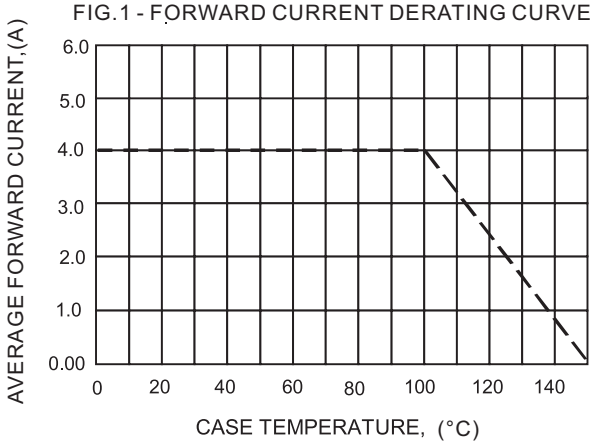


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

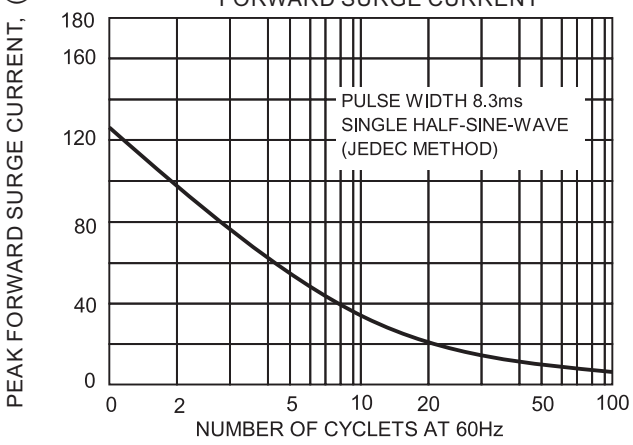


FIG. 3 - TYPICAL FORWARD CHARACTERISTICS

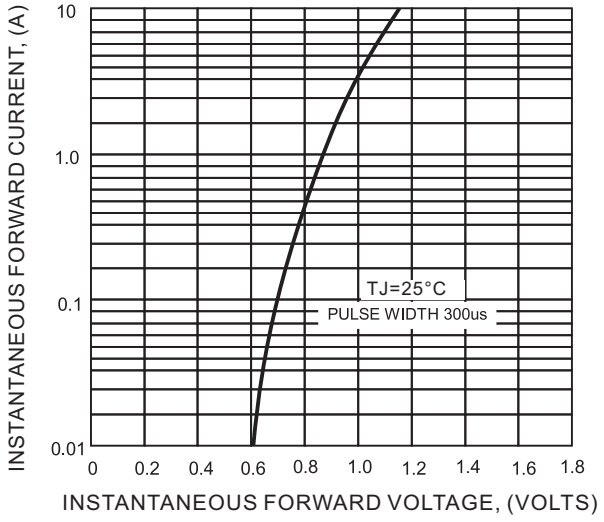


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

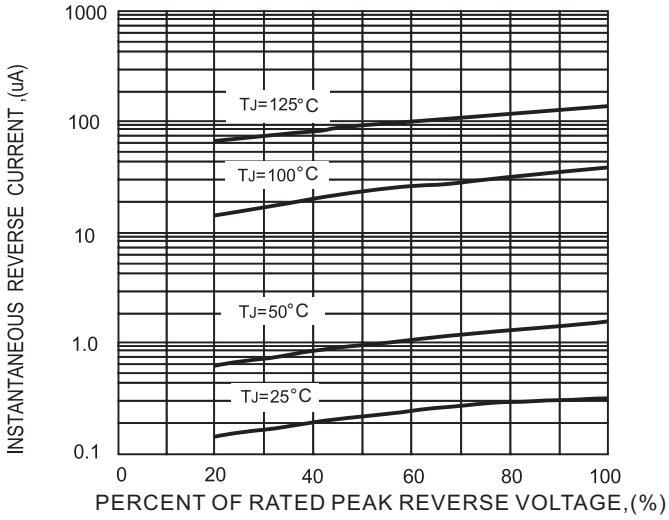
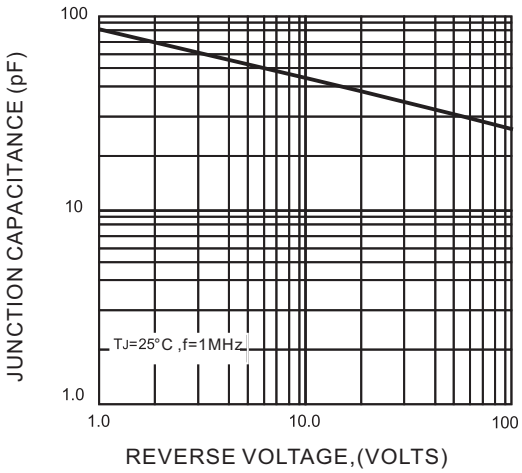


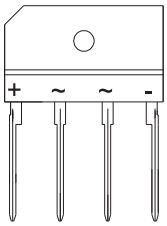
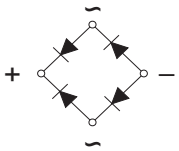
FIG. 5 - TYPICAL JUNCTION CAPACITANCE



KBJ4005 THRU KBJ410

4.0A Glass Passivated Single Phase Bridge Rectifiers - 50 - 1000V

Pinning information

Simplified outline	Symbol
	

Marking

Type number	Marking code
KBJ4005	KBJ4005
KBJ401	KBJ401
KBJ402	KBJ402
KBJ404	KBJ404
KBJ406	KBJ406
KBJ408	KBJ408
KBJ410	KBJ410