

Features

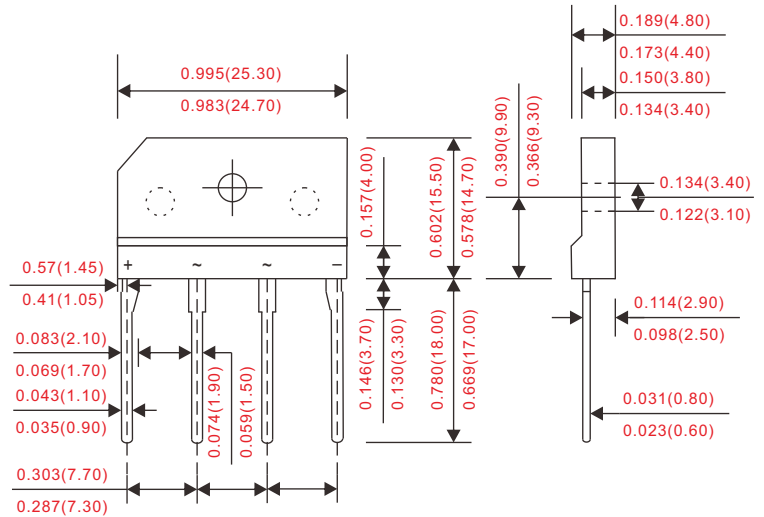
- Ideal for printed circuit board.
- High forward surge current capability.
- General purpose use in AC-TO-DC bridge full wave rectification for switching power supply, home, office equipment and telecommunication applications.
- Glass passivated chip junction.
- Suffix "G" indicates Halogen-free part, ex. KBJ402G.
- Lead-free parts meet RoHS requirements.

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

Outline

KBJ



Dimensions in inches and (millimeters)

Maximum ratings and electrical characteristics

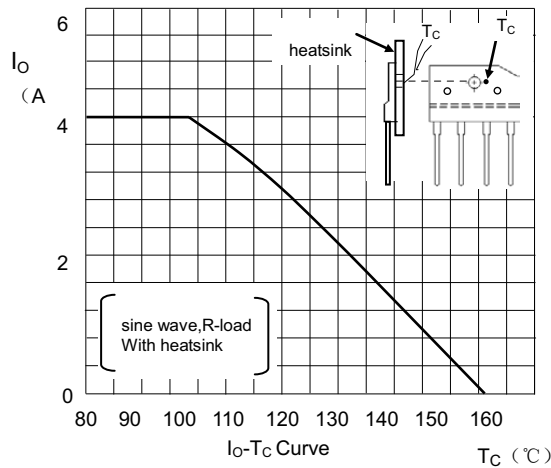
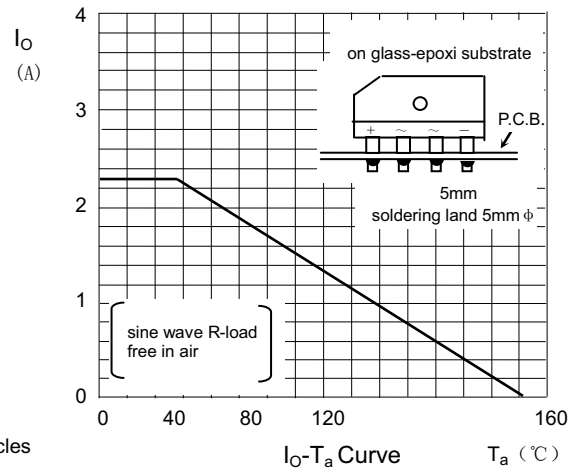
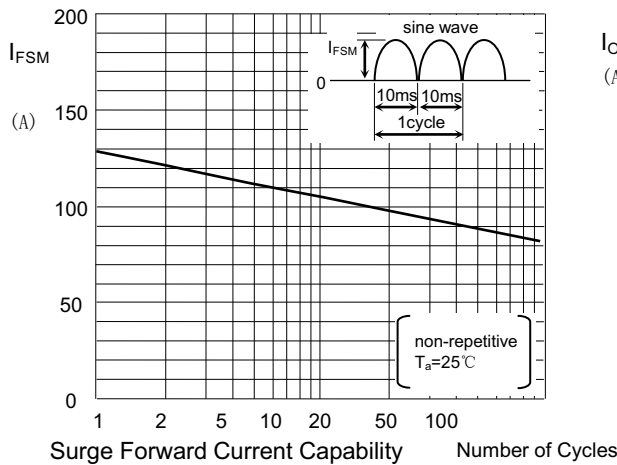
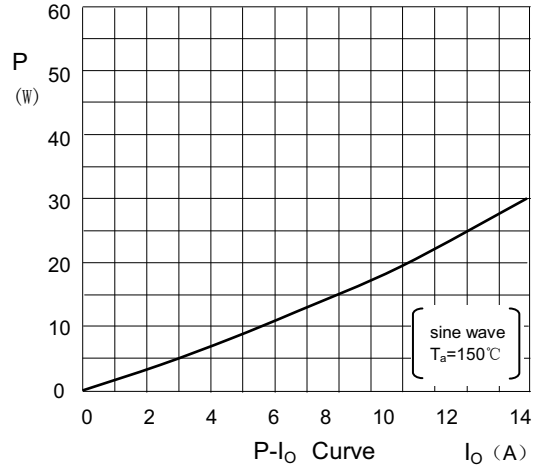
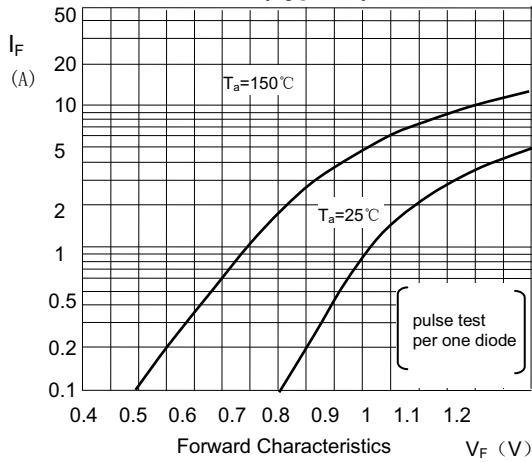
Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	with heatsink $T_c = 98^\circ\text{C}$	I_o			4	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}			130	A
Peak Reverse current	$V_R = V_{RRM}$ $T_A = 25^\circ\text{C}$	I_R			10	uA
Thermal resistance	junction to ambient	$R_{\theta JA}$		30		$^\circ\text{C/W}$
	junction to lead	$R_{\theta JL}$		6		$^\circ\text{C/W}$
	junction to case	$R_{\theta JC}$		5.5		$^\circ\text{C/W}$
Dielectric Strength	Terminals to case, AC 1 minute	V_{dis}		2.5		kV
Mounting Torque	Recommend torque : 5kg·cm	TOR		8		kg·cm
Storage temperature		T_{STG}		-40 ~ +150		$^\circ\text{C}$

Symbol	Marking code	Max. repetitive peak reverse voltage V_{RRM} (V)	Max. RMS voltage V_{RMS} (V)	Max. DC blocking voltage V_R (V)	Max. forward voltage @2A, $T_A = 25^\circ\text{C}$ V_F (V)	Operating Junction temperature T_J ($^\circ\text{C}$)
KBJ402	KBJ402	200	140	200	1.0	+150
KBJ404	KBJ404	400	280	400		
KBJ406	KBJ406	600	420	600		
KBJ408	KBJ408	800	560	800		
KBJ410	KBJ410	1000	700	1000		

Rating and characteristic curves

Characteristics(Typical)



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