



# KBJ1004~KBJ1010

## Glass Passivated Bridge Rectifiers

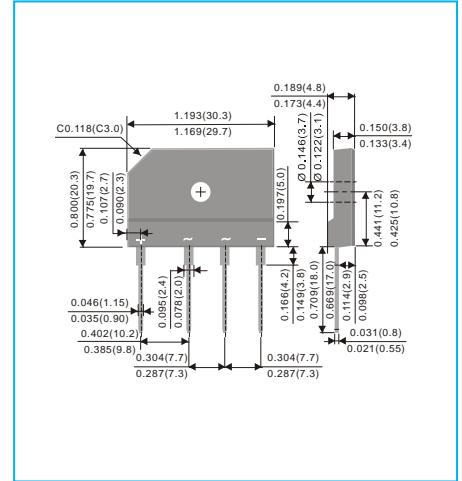
**VOLTAGE** 400 to 1000 Volt **CURRENT** 10 Ampere **KBJ** **Unit: Inch(mm)**

### FEATURES

- UL Recognized File #E228882
- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique.
- Lead free in compliance with EU RoHS 2.0
- Glass passivated chip junction

### MECHANICAL DATA

- Case: KBJ
- Terminals: Leads solderable per MIL-STD-750, Method 2026
- Polarity: As marked on body
- Mounting torque: 8.5 inch-lbs. Max.
- Weight: 6.96g



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	KBJ 1004	KBJ 1006	KBJ 1008	KBJ 1010	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	400	600	800	1000	V
Maximum average forward rectified current	$I_{F(AV)}$	10				A
Peak forward surge current, 8.3 ms single half sine-wave	$I_{FSM}$	200				A
Rating of fusing ( $t < 8.3ms$ )(Note 1)	$I^2t$	166				A <sup>2</sup> s
Maximum instantaneous forward voltage per diode $I_F = 5 A$ $I_F = 10A$	$V_F$	1 1.1				V
Maximum reverse current @ rated $V_R$ $T_J = 25^\circ C$ $T_J = 125^\circ C$	$I_R$	5 500				$\mu A$
Typical junction capacitance (Note 2)	$C_J$	66				pF
Typical thermal resistance (Note 3) (Note 4)	$R_{\theta JA}$ $R_{\theta JC}$	22 1.6				$^\circ C/W$
Operating junction temperature range	$T_J$	- 55 to +150				$^\circ C$
Storage temperature range	$T_{STG}$	- 55 to +150				$^\circ C$

Note 1: Non-repetitive, for  $t > 1ms$  and  $< 8.3ms$

Note 2: Measured at 1MHz and applied Reverse bias of 4V DC

Note 3: Products installed on the PCB, Without heatsink

Note 4: Products installed on aluminum plate heatsink



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## TYPICAL CHARACTERISTIC CURVES

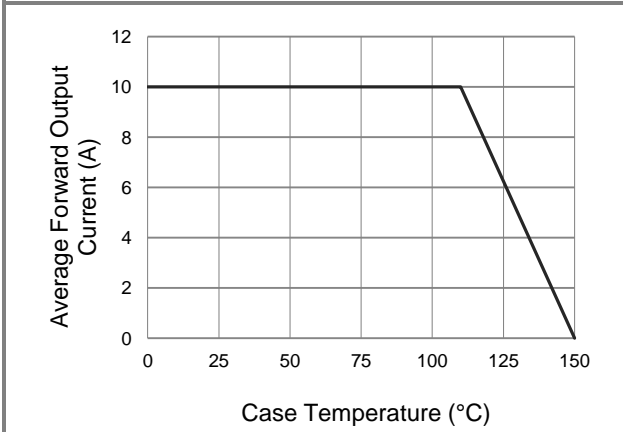


Fig.1 Forward Current Derating Curve

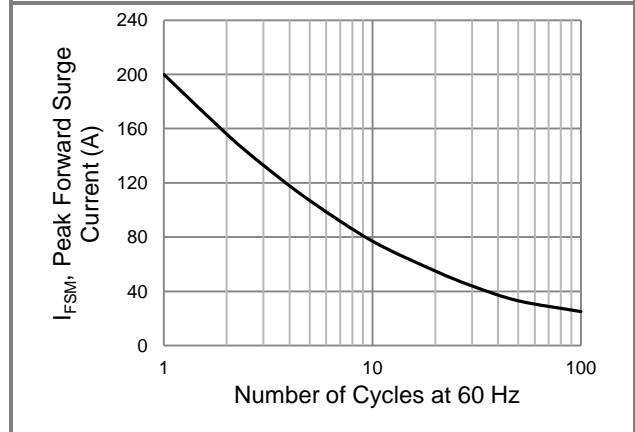


Fig.2 Maximum Forward Surge Current

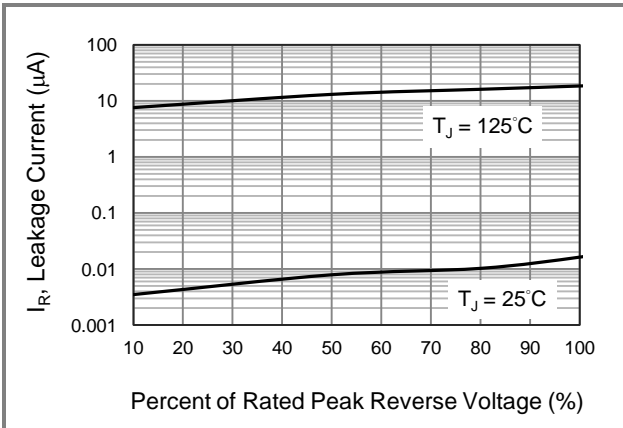


Fig.3 Typical Reverse Characteristics

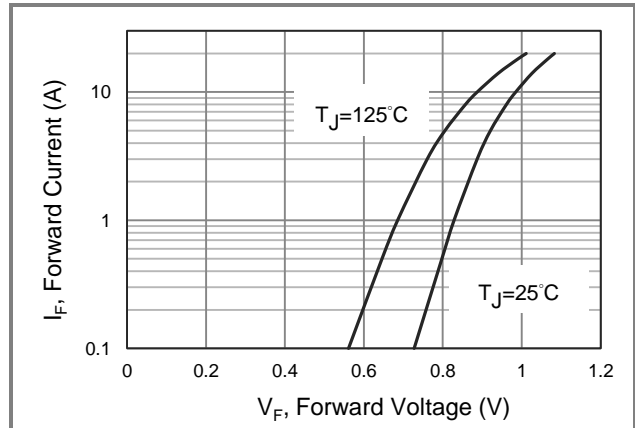


Fig.4 Typical Forward Characteristics

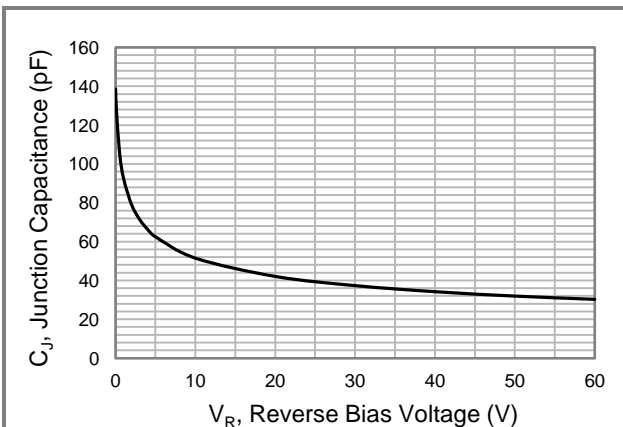


Fig.5 Typical Junction Capacitance



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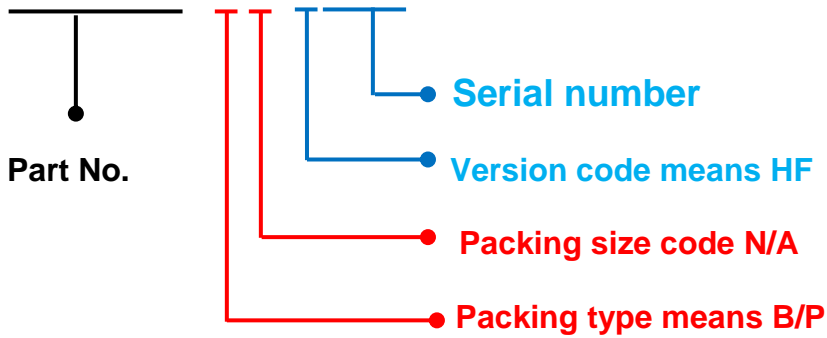
## Part No\_packing code\_Version

KBJ1004\_B0\_00001

KBJ1004\_B0\_10001

For example :

**KBJ1004\_**B0\_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>st</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>st</sup> ~5 <sup>st</sup> Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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