



# KBJ4005G THUR KBJ410G

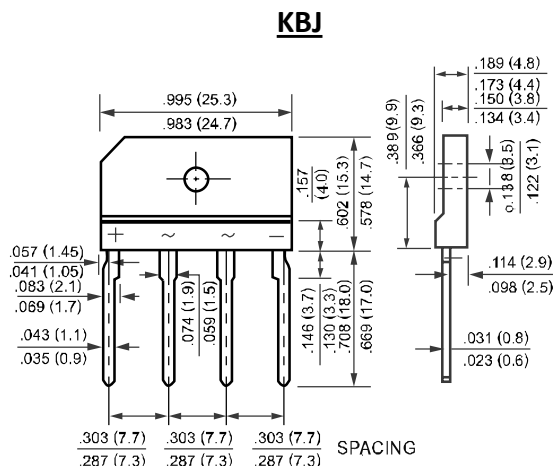
## Single Phase 4.0 AMP Glass Passivated Bridge Rectifier

### Features

- Glass passivated die construction.
- Low forward voltage drop.
- High surge current capability.
- Plastic material-UL flammability 94V-0.

### Mechanical Data

- Case:KBJ Molded Plastic.
- Terminals:Plated Leads Solderable per MIL-STD-202,Method208.
- Polarity:As Marked on Case
- Marking Information: Type Number.
- Mounting Position : Any



### 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%.

TYPE NUMBER	SYMBOL	KBJ	KBJ	KBJ	KBJ	KBJ	KBJ	KBJ	UNITS	
		4005G	401G	402G	404G	406G	408G	410G		
Peak Repetitive Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V	
Working Peak Reverse Voltage	$V_{RWM}$									
DC Blocking Voltage	$V_{DC}$									
RMS Reverse Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V	
Maximum average forward rectified current	$I_{F(AV)}$	4.0							A	
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	150							A	
$I^2 t$ Rating for fusing ( $t < 8.3ms$ )	$I^2 t$	93							A <sup>2</sup> s	
Forward Voltage per element	VFM								1.0	V
@ $I_F=2.0A$ @ $I_F=4.0A$									1.1	
Maximum DC Reverse Current @ $T_A=25^\circ C$ at Rated DC Blocking Voltage @ $T_A=125^\circ C$	$I_R$	10.0 500							$\mu A$	
Typical Junction Capacitance (Note 1)	$C_J$	45							pF	
Typical Thermal Resistance (Note2)	$R_{\theta JC}$	2.2							$^\circ C/W$	
Storage temperature range	$T_{STG}$	-55 to +150							$^\circ C$	
Operating junction temperature range	$T_J$	-55 to +150							$^\circ C$	

**NOTES:**

1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C
2. Device mounted on 50mm x 50mm x 1.6mm Cu Plate Heatsink.



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### Rating And Characteristic Curves

FIG.1-FORWARD CURRENT DERATING CURVE

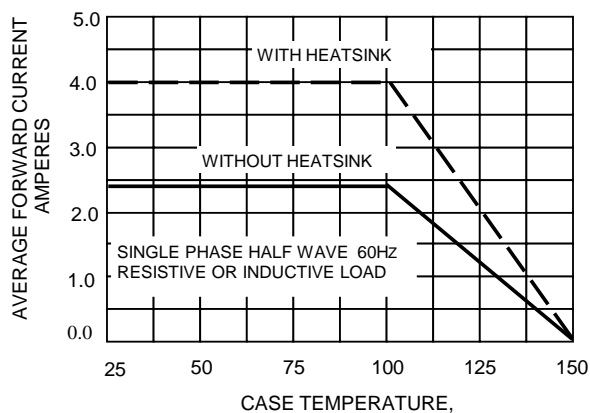


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

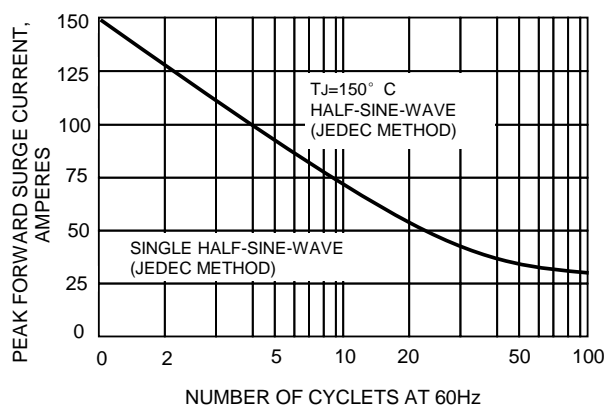


FIG.3-TYPICAL FORWARD CHARACTERISTICS

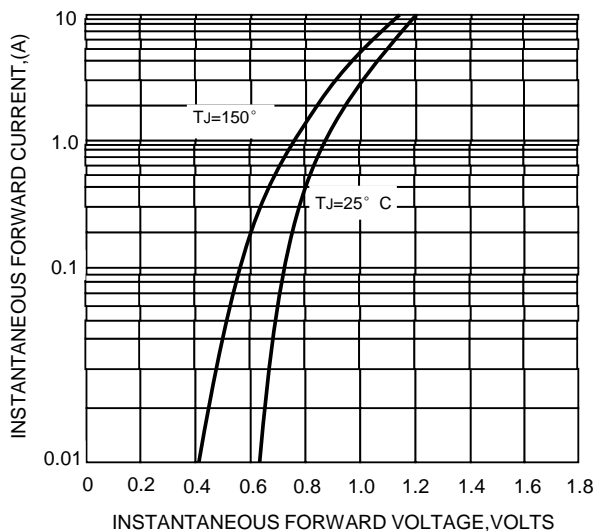


FIG.4-TYPICAL REVERSE CHARACTERISTICS

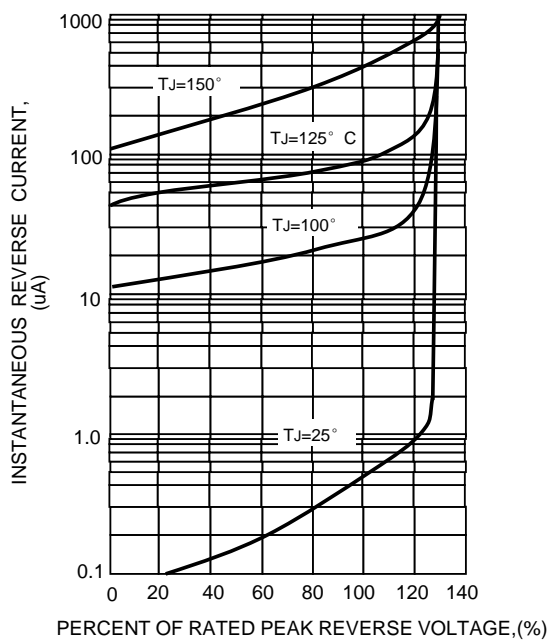
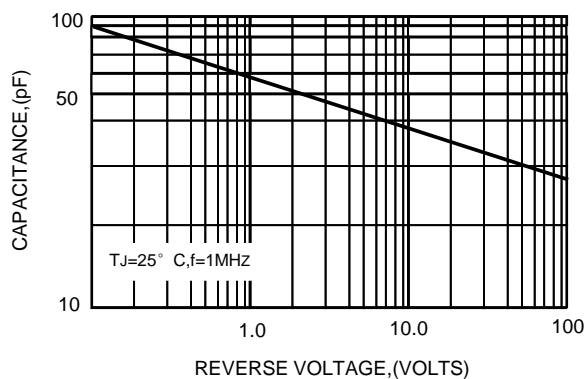


FIG.5-TYPICAL JUNCTION CAPACITANCE





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