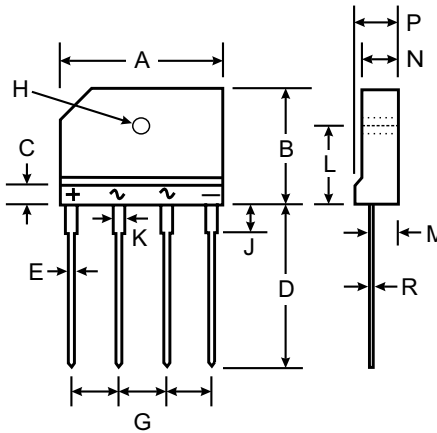


### Features

- Glass Passivated Die Construction
- High Case Dielectric Strength of  $1500V_{RMS}$
- Low Reverse Leakage Current
- Surge Overload Rating to 170A Peak
- Ideal for Printed Circuit Board Applications
- Plastic Material - UL Flammability Classification 94V-0
- UL Listed Under Recognized Component Index, File Number E94661

### Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads, Solderable per MIL-STD-202, Method 208
- Polarity: Molded on Body
- Mounting: Through Hole for #6 Screw
- Mounting Torque: 5.0 in-lbs Maximum
- Approx. Weight: 4.6 grams
- Marking: Type Number



KBJ		
Dim	Min	Max
A	24.80	25.20
B	14.70	15.30
C	4.00 Nominal	
D	17.20	17.80
E	0.90	1.10
G	7.30	7.70
H	3.10 $\varnothing$	3.40 $\varnothing$
J	3.30	3.70
K	1.50	1.90
L	9.30	9.70
M	2.50	2.90
N	3.40	3.80
P	4.40	4.80
R	0.60	0.80
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

Characteristic	Symbol	KBJ 6005G	KBJ 601G	KBJ 602G	KBJ 604G	KBJ 606G	KBJ 608G	KBJ 610G	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current @ $T_C = 110^\circ\text{C}$	$I_O$	6.0							A
Non-Repetitive Peak Forward Surge Current, 8.3 ms single half-sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	170							A
Forward Voltage per element @ $I_F = 3.0\text{A}$	$V_{FM}$	1.0							V
Peak Reverse Current @ $T_C = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_C = 125^\circ\text{C}$	$I_{RM}$	5.0 500							$\mu\text{A}$
$I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ ) (Note 3)	$I^2t$	120							$\text{A}^2\text{s}$
Typical Junction Capacitance per Element (Note 1)	$C_j$	80							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	1.5							$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to +150							$^\circ\text{C}$

- Notes:
1. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
  2. Thermal resistance from junction to case per element. Unit mounted on 75 x 75 x 1.6mm aluminum plate heat sink.
  3. Non-repetitive, for  $t > 1\text{ms}$  and  $< 8.3\text{ms}$ .

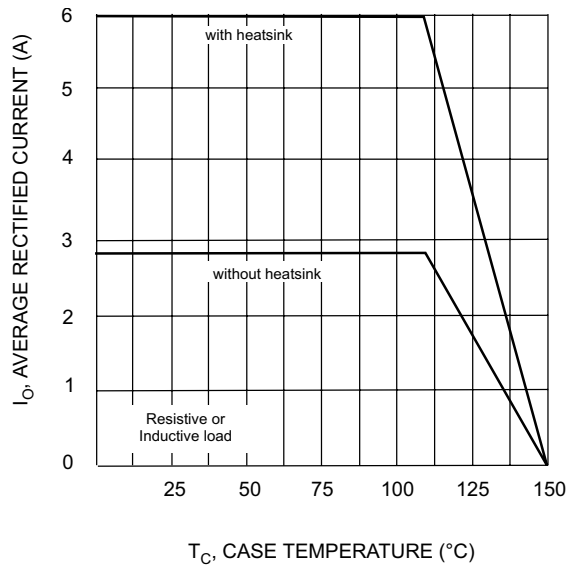


Fig. 1 Forward Current Derating Curve

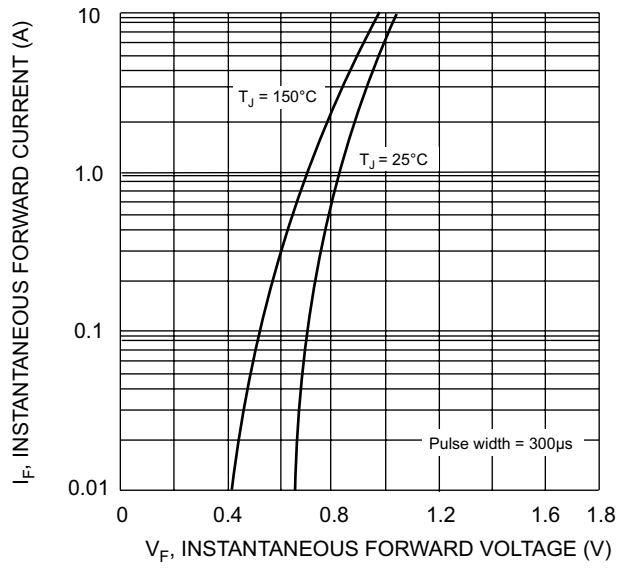


Fig. 2 Typical Forward Characteristics

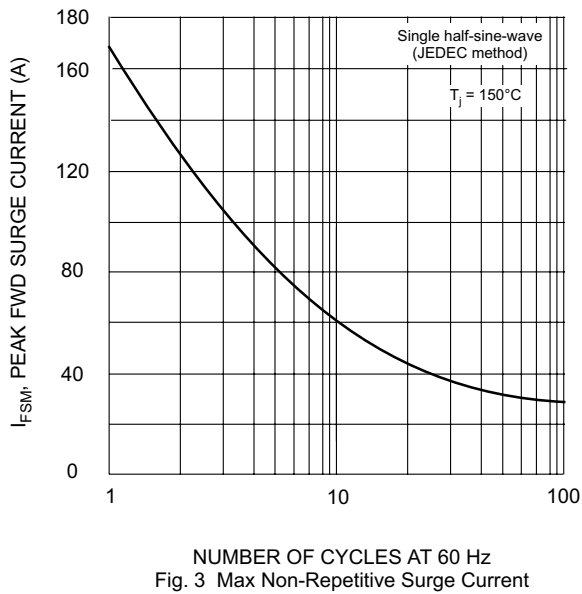


Fig. 3 Max Non-Repetitive Surge Current

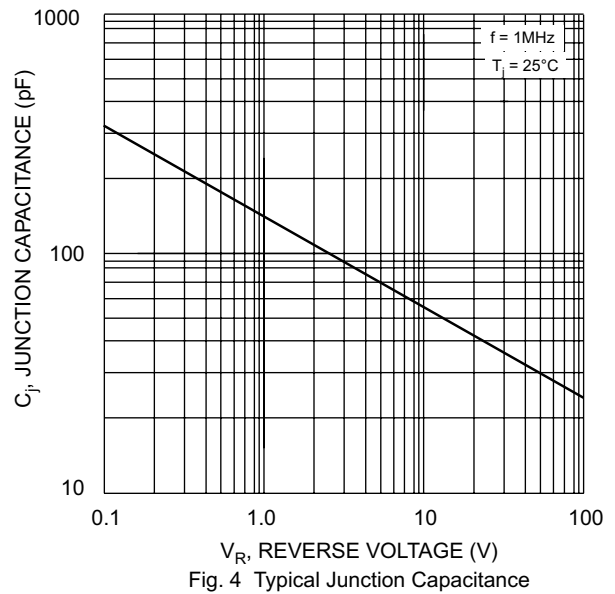


Fig. 4 Typical Junction Capacitance

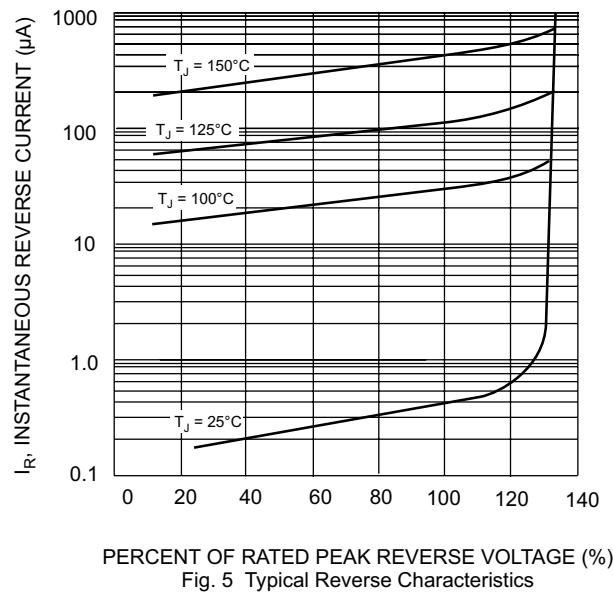


Fig. 5 Typical Reverse Characteristics