

## KB201 THRU KB207

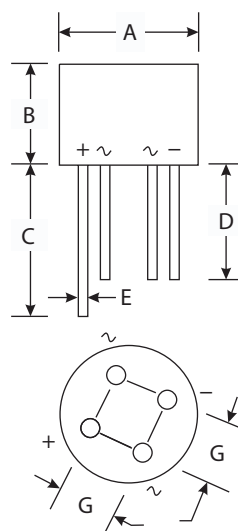
CURRENT 2.0 Amperes  
VOLTAGE 50 to 1000 Volts

### Features

- Glass Passivated Die Construction
- Diffused Junction
- Low Forward Voltage Drop, High Current Capability
- Surge Overload Rating to 60A Peak
- Ideal for Printed Circuit Boards
- Case to Terminal Isolation Voltage 1500V
- Plastic Material - UL Flammability Classification 94V-0

### Mechanical Data

- Case : WOB Molded Plastic
- Terminals : Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity : As Marked on Case
- Weight : 1.3 grams (approx.)
- Mounting Position : Any
- Marking : Type Number



WOB		
Dim	Min	Max
A	8.84	9.86
B	4.00	4.60
C	27.90	—
D	25.40	—
E	0.71	0.81
G	4.60	5.60
All Dimensions in mm		

### Maximum Ratings And Electrical Characteristics

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

		Symbols	KB201	KB202	KB203	KB204	KB205	KB206	KB207	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		$V_{RMM}$ $V_{RWM}$ $V_R$	50	100	200	400	600	800	1000	Volts
RMS Reverse Voltage		$V_R(RMS)$	35	70	140	280	420	560	700	Volts
Average Rectified Output Current @ $T_A=25^{\circ}C$		$I_o$	2.0							Amps
Non-Repetitive Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load per element (JEDEC method)		$I_{FSM}$	60							Amps
Forward Voltage (per element) @ $I_F=2.0\text{ A}$		$V_{FM}$	1.1							Volts
Peak Reverse Current at Rated DC Blocking Voltage	@ $T_A=25^{\circ}C$	$I_{RM}$	5.0							$\mu\text{ A}$
	@ $T_A=125^{\circ}C$		500							
Typical Junction Capacitance (Note 2)		$C_j$	16							pF
Typical Thermal Resistance Junction to Case		$R \theta_{JC}$	40							$^{\circ}C/W$
Operating and Storage Temperature Range		$T_j$ $T_{STG}$	-65 to +150							$^{\circ}C$

#### Notes:

- (1) Thermal resistance from junction to case mounted in PC board with 13 x 13mm (0.03mm thick) land areas.
- (2) Measured at 1.0MHz and Applied Reverse Voltage of 4.0V DC.

## RATINGS AND CHARACTERISTIC CURVES KB201 THRU KB207

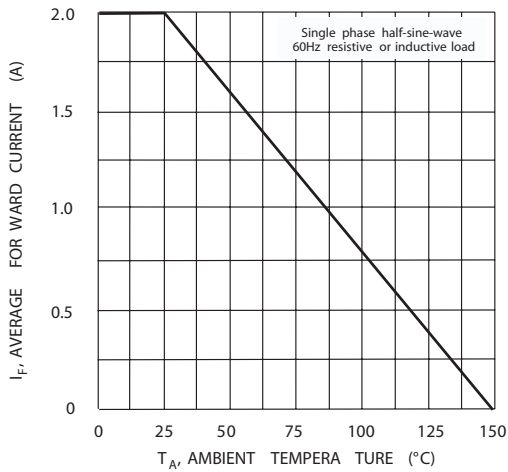


Fig. 1 Forward Current Derating Curve

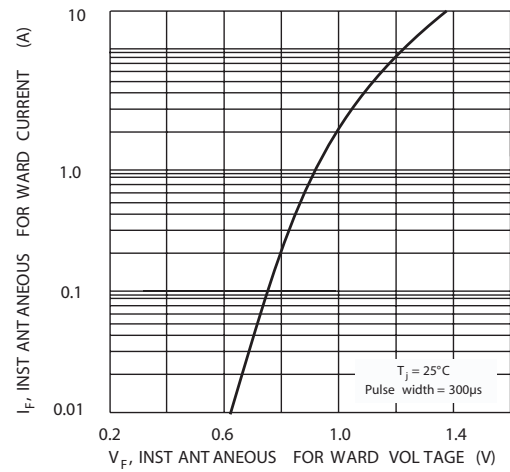


Fig. 2 Typical Forward Characteristics

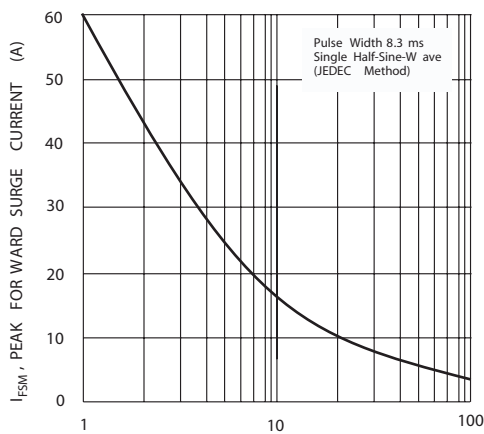


Fig. 3 Max Non-Repetitive Surge Current

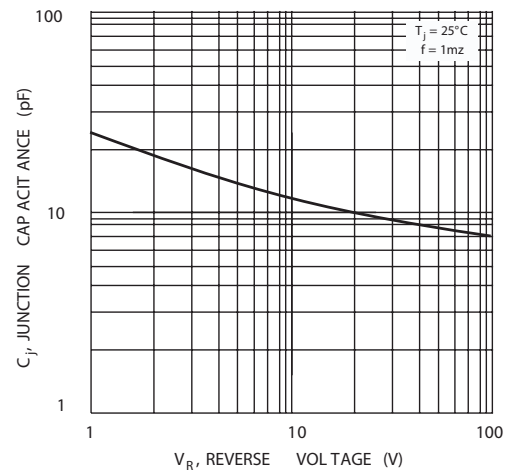


Fig. 4 Typical Junction Capacitance

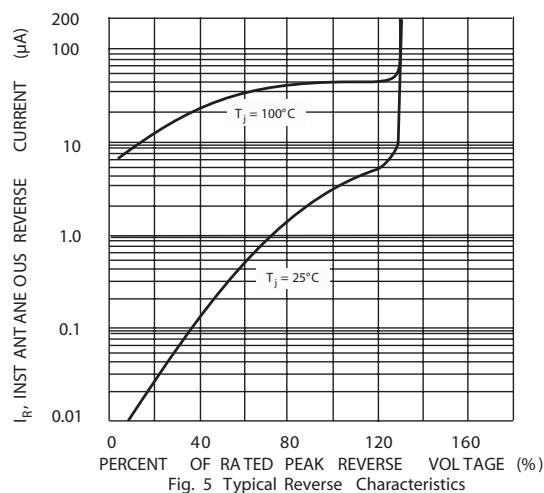


Fig. 5 Typical Reverse Characteristics