



# KBU600 – KBU610

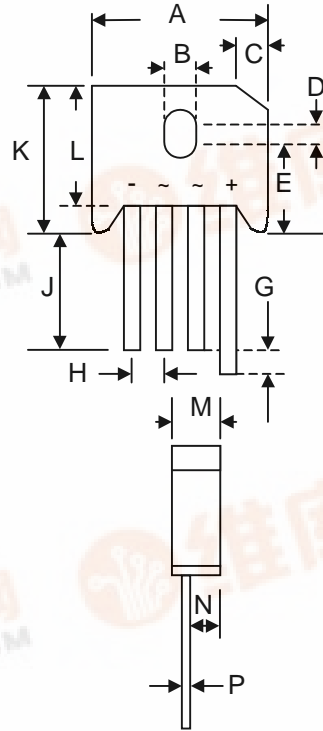
## 6.0A BRIDGE RECTIFIER

### Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards
- UL Recognized File # E157705

### Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 8.0 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



KBU		
Dim	Min	Max
A	22.70	23.70
B	3.80	4.10
C	4.20	4.70
D	1.70	2.20
E	10.30	11.30
G	4.50	6.80
H	4.60	5.60
J	25.40	—
K	—	19.30
L	16.80	17.80
M	6.60	7.10
N	4.70	5.20
P	1.20	1.30
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	KBU 600	KBU 601	KBU 602	KBU 604	KBU 606	KBU 608	KBU 610	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	$V_{RWM}$								
DC Blocking Voltage	$V_R$								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current @ $T_C = 100^\circ\text{C}$	$I_O$	6.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	250							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 @ $T_C = 100^\circ\text{C}$	$I_R$	10 1.0							$\mu\text{A}$ mA
Rating for Fusing ( $t < 8.3\text{ms}$ ) (Note 1)	$I^2t$	166							$\text{A}^2\text{s}$
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	4.2							K/W
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to +150							$^\circ\text{C}$

Note: 1. Non-repetitive for  $t > 1\text{ms}$  and  $< 8.3\text{ms}$ .

2. Thermal resistance junction to case per element mounted on PC board with 13.0x13.0x0.03mm thick land areas.



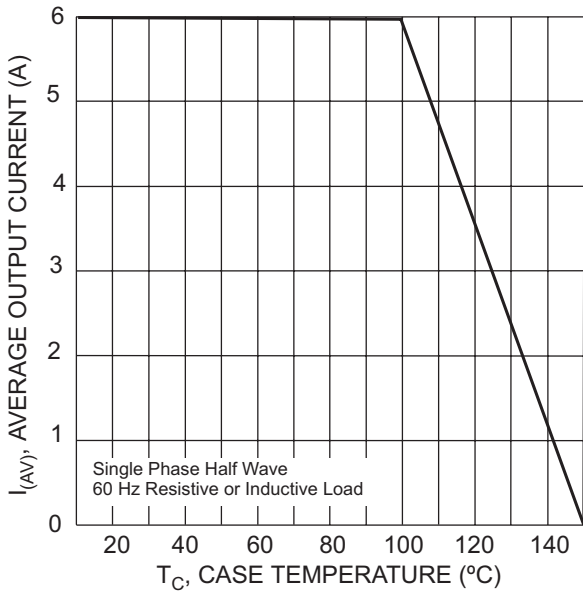


Fig. 1 Forward Current Derating Curve

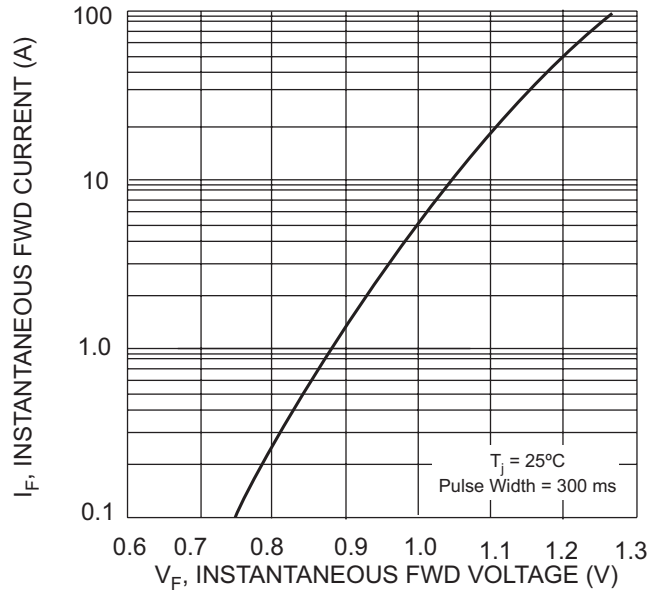


Fig. 2 Typical Forward Characteristics, per element

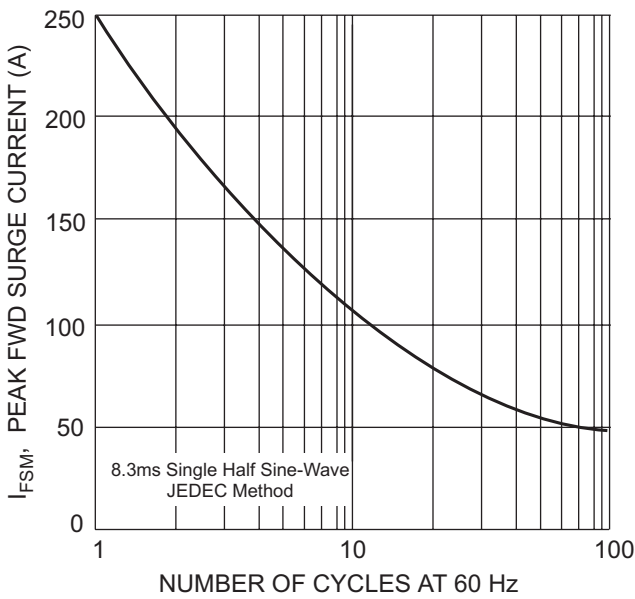


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

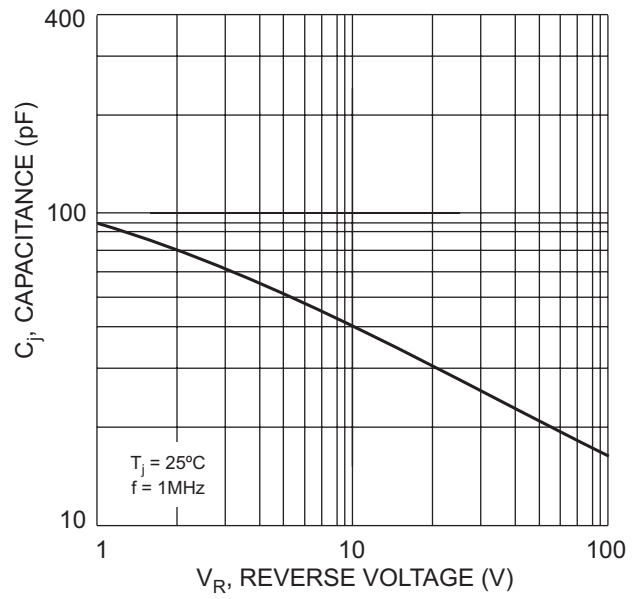


Fig. 4 Typical Junction Capacitance Per Element

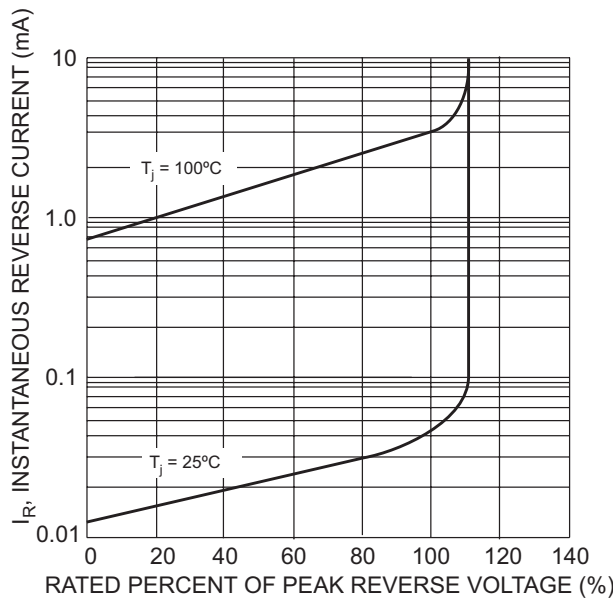


Fig. 5 Typical Reverse Characteristics

## ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
KBU600	SIL Bridge	400 Units/Box
KBU601	SIL Bridge	400 Units/Box
KBU602	SIL Bridge	400 Units/Box
KBU604	SIL Bridge	400 Units/Box
KBU606	SIL Bridge	400 Units/Box
KBU608	SIL Bridge	400 Units/Box
KBU610	SIL Bridge	400 Units/Box

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

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