

# Silicon Bridge Rectifiers



## KBU600-G thru 610-G (RoHS Device)

**Reverse Voltage: 50 ~ 1000 Volts**

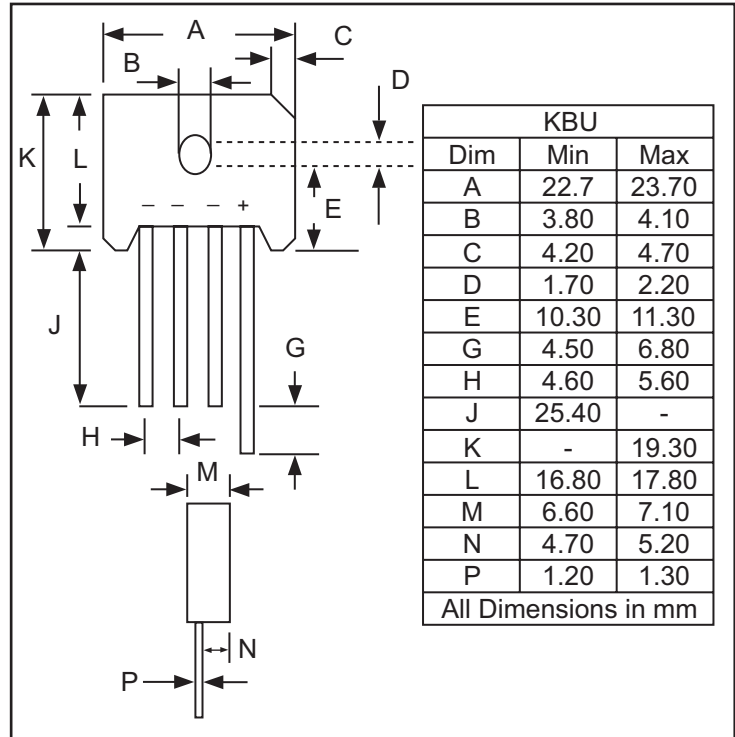
**Forward Current: 6.0 Amp**

**Features:**

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards

**Mechanical Data:**

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL STD-202, Method 208
- Weight: 1.7 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



CHARACTERISTICS	Symbol	KBU 600-G	KBU 601-G	KBU 602-G	KBU 604-G	KBU 606-G	KBU 608-G	KBU 610-G	UNIT
Peak Repetitive Reverse Voltage	$V_{RRM}$								
Working Peak Reverse Voltage	$V_{RWM}$	50	100	200	400	600	800	1000	V
DC Blocking Voltage	$V_R$								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current @ $T_A = 100^\circ\text{C}$	$I_O$	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							uA mA
Rating for Fusing ( $t<8.3\text{ms}$ ) (Note1)	$I^2t$	166							$\text{A}^2\text{S}$
Typical Thermal Resistance (Note2)	$R_{\theta JC}$	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 ambient mounted on PC board with  $13.0 \times 13.0 \times 0.03\text{mm}$  thick land areas.

"-G" suffix designated RoHS compliant version

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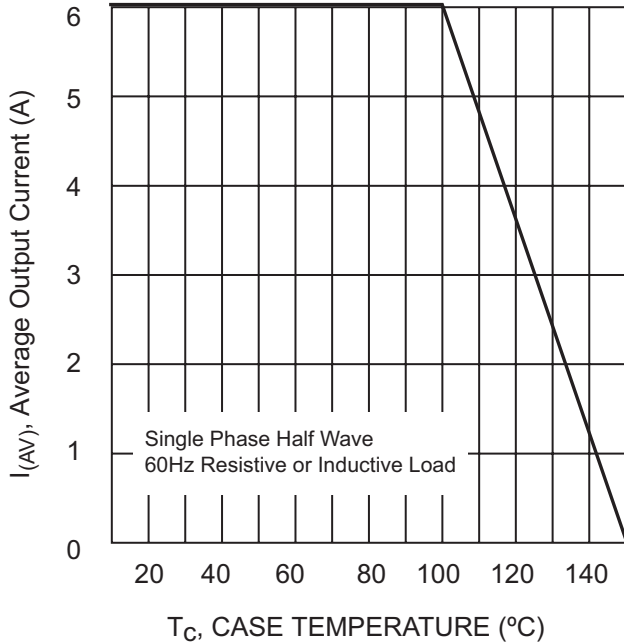


Fig. 1 Forward Current Derating Curve

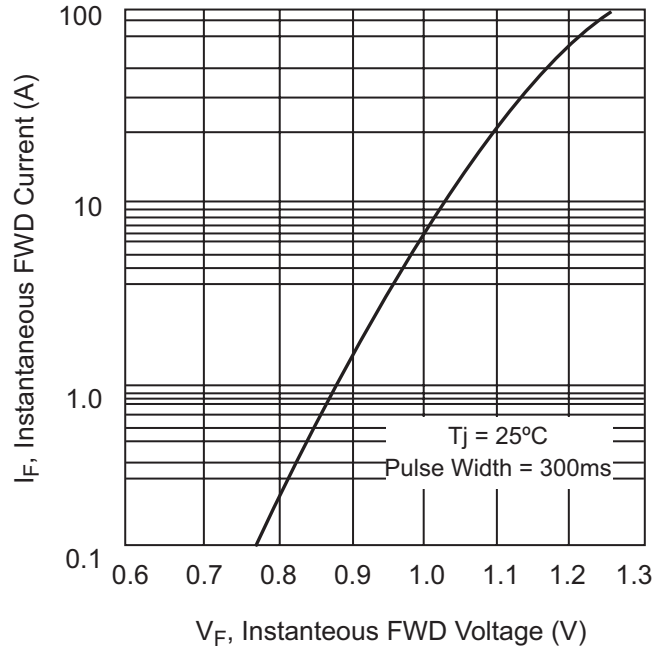


Fig. 2 Typical Forward Characteristics, per element

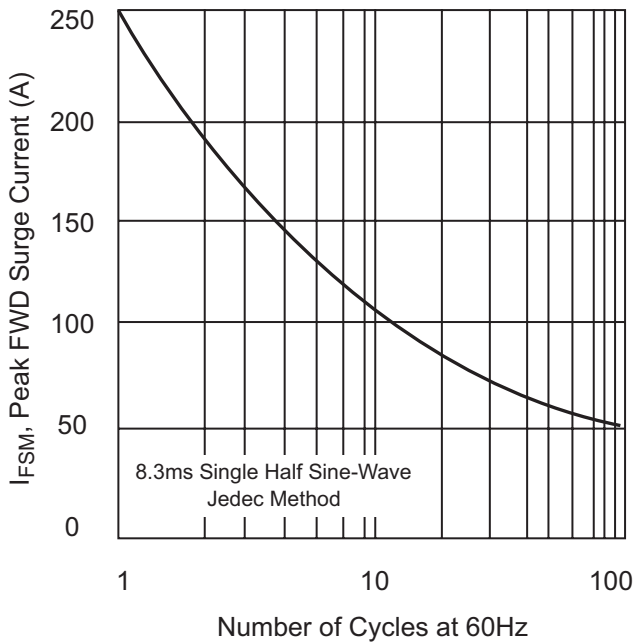


Fig. 3 Max Non-Repetitive FWD Surge Current

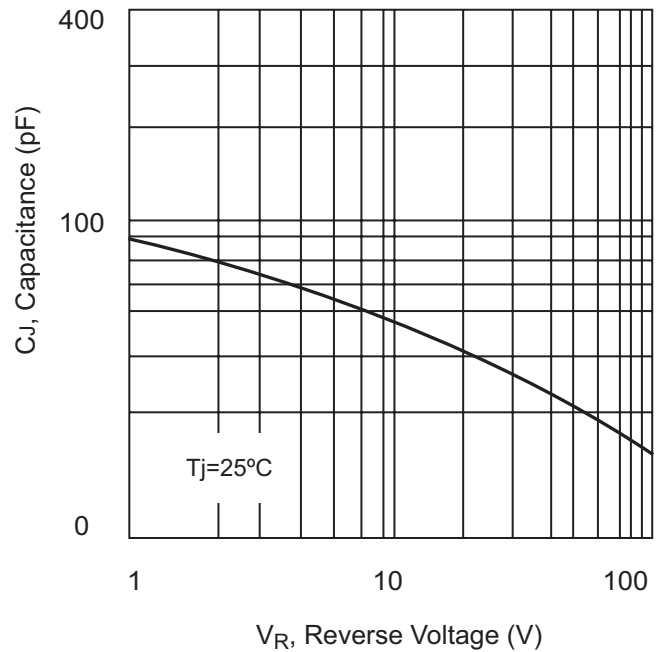


Fig. 4. Typical Junction Capacitance Per Element