



America Semiconductor

Silicon Bridge Rectifier

KBL606G thru KBL610G

$V_{RRM} = 50\text{ V} - 1000\text{ V}$

$I_F = 6\text{ A}$

Features

- Types up to 1000 V V_{RRM}
- Ideal for printed circuit board
- High surge current capability
- Reliable low cost construction utilizing molded plastic technique

Mechanical Data

Case: Molded plastic

Weight: 0.167 oz, 5 g

Mounting position: Any

Terminals: Plated leads, solderable per MIL-STD-202F, Method 208

Polarity: Marked on body

KBL Package



Maximum ratings, at $T_j = 25\text{ }^\circ\text{C}$, unless otherwise specified

Parameter	Symbol	Conditions	KBL606G	KBL608G	KBL610G	Unit
Repetitive peak reverse voltage	V_{RRM}		600	800	1000	V
RMS reverse voltage	V_{RMS}		420	560	700	V
DC blocking voltage	V_{DC}		600	800	1000	V
Continuous forward current	I_F	$T_C \leq 50\text{ }^\circ\text{C}$	6	6	6	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	$T_C = 25\text{ }^\circ\text{C}$, $t_p = 8.3\text{ ms}$	180	180	180	A
Operating temperature	T_j		-55 to 150	-55 to 150	-55 to 150	$^\circ\text{C}$
Storage temperature	T_{stg}		-55 to 150	-55 to 150	-55 to 150	$^\circ\text{C}$

Electrical characteristics, at $T_j = 25\text{ }^\circ\text{C}$, unless otherwise specified

Parameter	Symbol	Conditions	KBL606G	KBL608G	KBL610G	Unit
Diode forward voltage	V_F	$I_F = 6\text{ A}$, $T_j = 25\text{ }^\circ\text{C}$	1.1	1.1	1.1	V
Reverse current	I_R	$V_R = 50\text{ V}$, $T_j = 25\text{ }^\circ\text{C}$	5	5	5	μA
		$V_R = 50\text{ V}$, $T_j = 125\text{ }^\circ\text{C}$	100	100	100	μA



