



# America Semiconductor

## Silicon Bridge Rectifier

### KBL401G thru KBL404G

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

$I_F = 4\text{ A}$

#### 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
- Silver plated copper leads

#### 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	KBL401G	KBL402G	KBL403G	KBL404G	Unit
Repetitive peak reverse voltage	$V_{RRM}$		50	100	200	400	V
RMS reverse voltage	$V_{RMS}$		35	70	140	280	V
DC blocking voltage	$V_{DC}$		50	100	200	400	V
Continuous forward current	$I_F$	$T_C \leq 50\text{ }^\circ\text{C}$	4	4	4	4	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	$T_C = 25\text{ }^\circ\text{C}$ , $t_p = 8.3\text{ ms}$	120	120	120	120	A
Operating temperature	$T_j$		-50 to 150	-50 to 150	-50 to 150	-50 to 150	$^\circ\text{C}$
Storage temperature	$T_{stg}$		-50 to 150	-50 to 150	-50 to 150	-50 to 150	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	KBL401G	KBL402G	KBL403G	KBL404G	Unit
Diode forward voltage	$V_F$	$I_F = 4\text{ A}$ , $T_j = 25\text{ }^\circ\text{C}$	1.1	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	5	$\mu\text{A}$
		$V_R = 50\text{ V}$ , $T_j = 125\text{ }^\circ\text{C}$	100	100	100	100	



