

# KBL4005 THRU KBL410

## SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIERS

VOLTAGE RANGE: 50 TO 1000 VOLTS

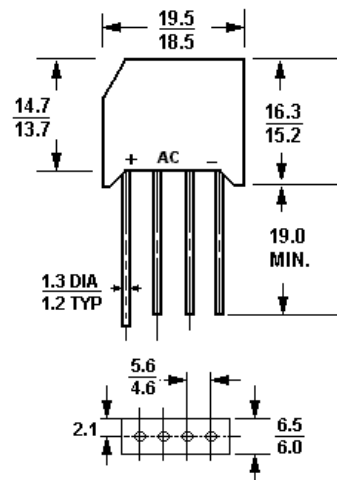
CURRENT: 4.0 AMPERES

### Features

- Surge overload rating: 200 amperes peak
- Ideal for printed circuit board application

### Mechanical Data

- Mounting position: Any



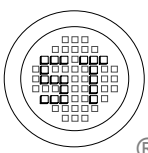
Dimensions in mm

### Absolute Maximum Ratings and Characteristics

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

	Symbols	KBL 4005	KBL 401	KBL 402	KBL 404	KBL 406	KBL 408	KBL 410	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Average rectified output current at $T_A = 50^\circ\text{C}$	$I_O$	4.0							A
Non-repetitive Peak forward surge current 8.3ms single half sine wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	200							A
Maximum instantaneous forward voltage drop per leg at 4.0A DC	$V_F$	1.0							V
Maximum DC reverse current at rated DC blocking voltage per leg	$I_R$	10 1.0							$\mu\text{A}$ mA
Typical junction capacitance(note)	$C_j$	40							pF
Operating junction temperature range	$T_J$	-55 to +125							°C
Storage temperature range	$T_{STG}$	-55 to +150							°C

Notes: Measured at 1.0MHz and applied reverse voltage of 4.0V.DC



**SEMTECH ELECTRONICS LTD.**

(Subsidiary of Semtech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002  
Certificate No. 05103



ISO 14001  
Certificate No. 7116

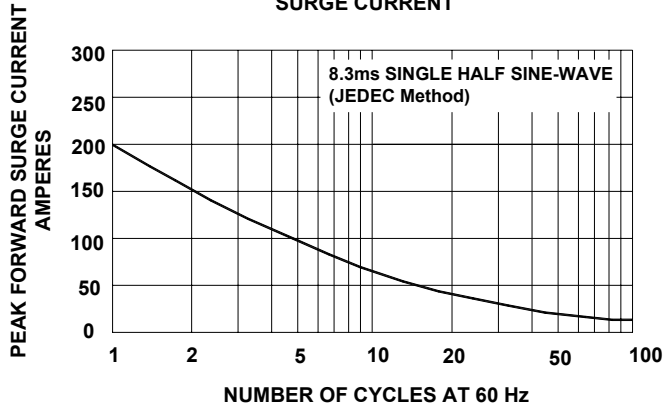


ISO 9001 : 2000  
Certificate No. 558-199-003-01

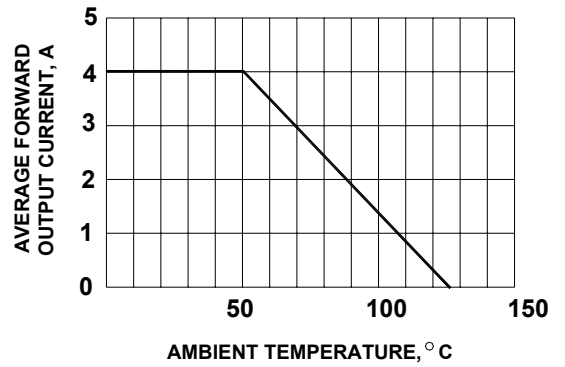
Dated : 21/04/2003

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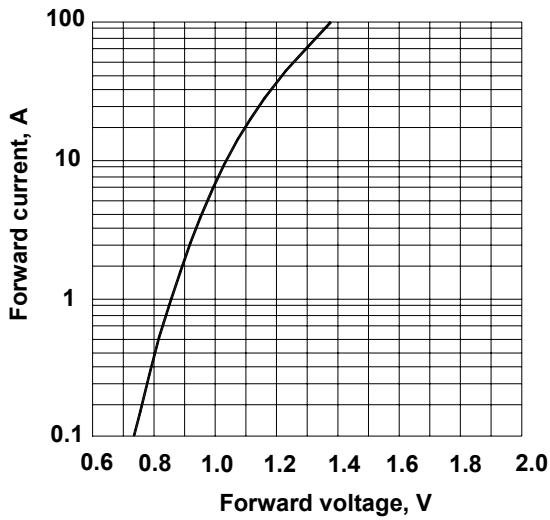
Fig.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



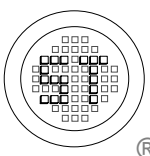
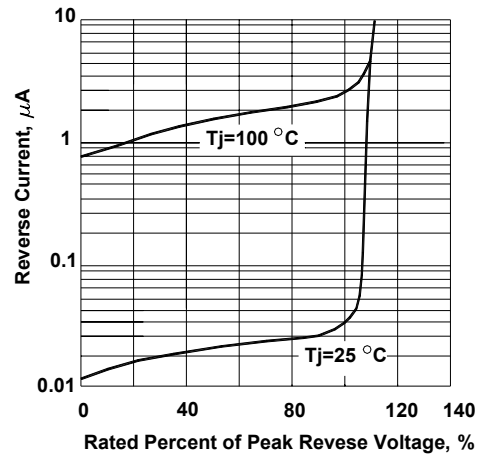
TYPICAL FORWARD CURRENT DERATING CURVE



Typical Forward Characteristics

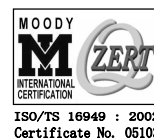


Typical Reverse Characteristics



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