

KBL4005 THRU KBL410

SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIERS

VOLTAGE RANGE: 50 TO 1000 VOLTS

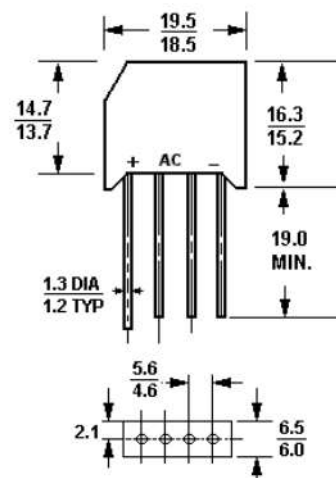
CURRENT: 4.0 AMPERES

Features

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

Mechanical Data

- Mounting position: Any



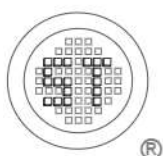
Dimensions in mm

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%.

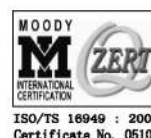
	Symbols	KBL 4005	KBL 401	KBL 402	KBL 404	KBL 406	KBL 408	KBL 410	Units
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Average rectified output current 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							μA mA
Typical junction capacitance(note)	C_j	40							pF
Operating junction temperature range	T_J	-55 to +125							$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-55 to +150							$^{\circ}\text{C}$

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

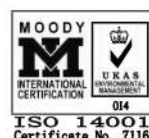


SEMTECH ELECTRONICS LTD.

(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



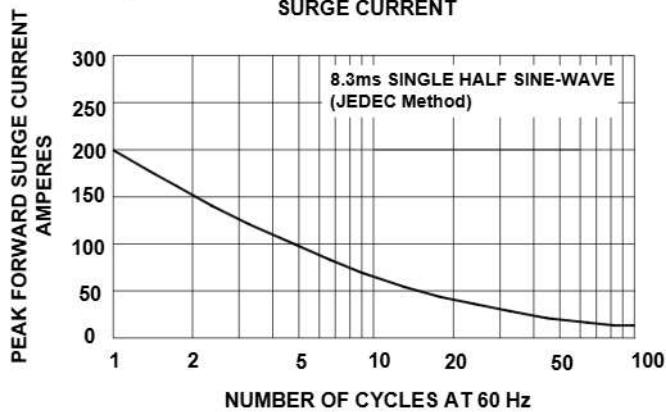
ISO 14001
Certificate No. 7116



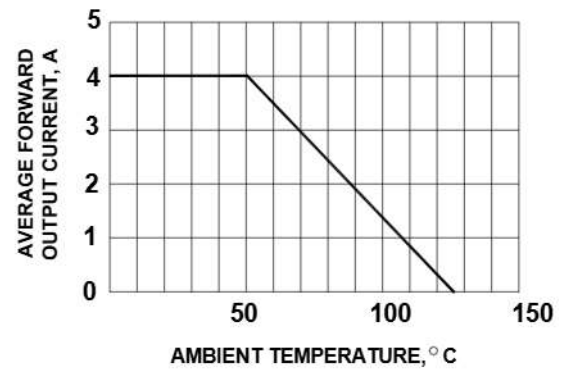
ISO 9001 : 2000
Certificate No. 558-199-03-04

Dated : 21/04/2003

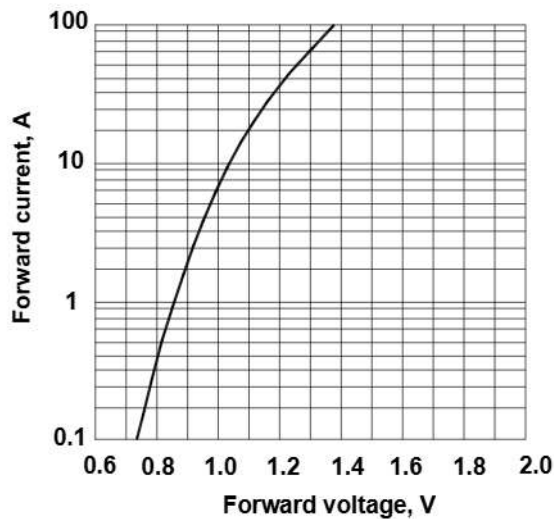
Fig.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



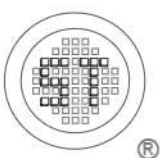
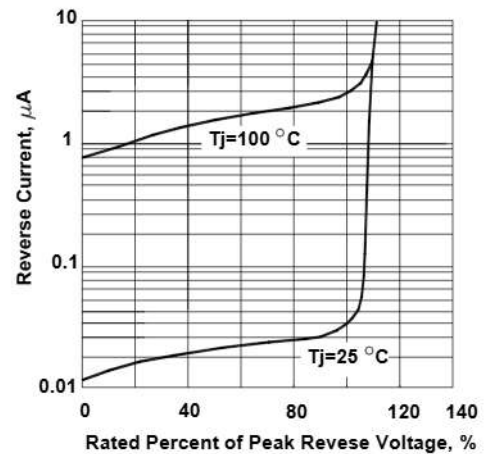
TYPICAL FORWARD CURRENT DERATING CURVE



Typical Forward Characteristics

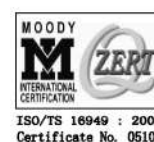


Typical Reverse Characteristics



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. 5528-1999-002-004

Dated : 21/04/2003