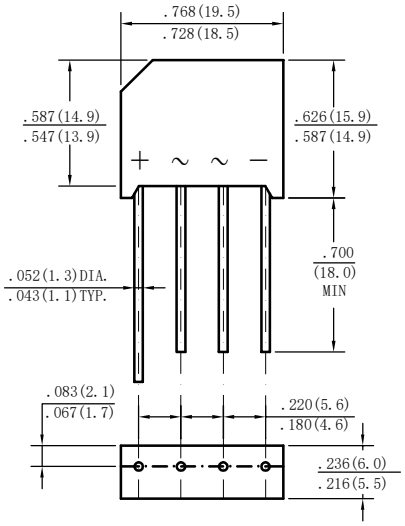
PECLERS®

KBL6005-KBL610

SINGLE PHASE BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 V
CURRENT - 6 **A**

KBL



Dimensions in inches and (millimeters)

FEATURES

- Glass Passivated Chip Junction
- This series is UL recognized under component index ,file number E127707
- High forward surge current capability
- Ideal for printed circuit board
- High temperature soldering guaranteed:260 ºC/10 second, 0.375" (9.5mm) lead length at 5 lbs.(2.3kg) tension.

MECHANICAL DATA

- Case: Molded plastic, KBL
- Terminal: Lead solderable per MIL-STD-202E method 208C
- Mounting Postition: Any
- Weight: 0.22ounce, 6.21gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	KBL6005	KBL601	KBL602	KBL604	KBL606	KBL608	KBL610	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current, at T_C=50℃ (Note 2)	$I_{(AV)}$	6.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	175							Amps
Rating for Fusing (t<8.3ms)	I^2t	166							A^2s
Maximum Instantaneous Forward Voltage Drop per bridge element at 6.0A	V_F	1.0							Volts
Maximum DC Reverse Current at rated DC blocking voltage per element, T_A=25℃	I_R	5							μAmps
Maximum DC Reverse Current at rated DC blocking voltage per element, T_A=100℃	I_R	1.0							mAmps
Typical Junction Capacitance (Note 1)	C_J	210							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	7.4							°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							°C

NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Unit mounted on 3.0"x3.0"x0.11" thick (7.5x7.5x0.3 cm) Al. plate.

RATING AND CHRACTERISTIC CURVES

FIG.1-DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT

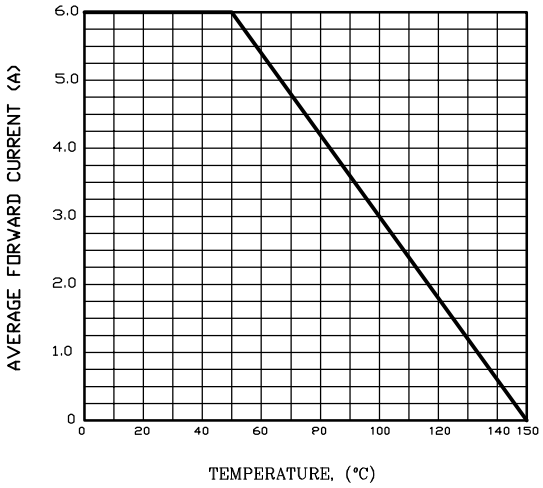


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current Per Leg

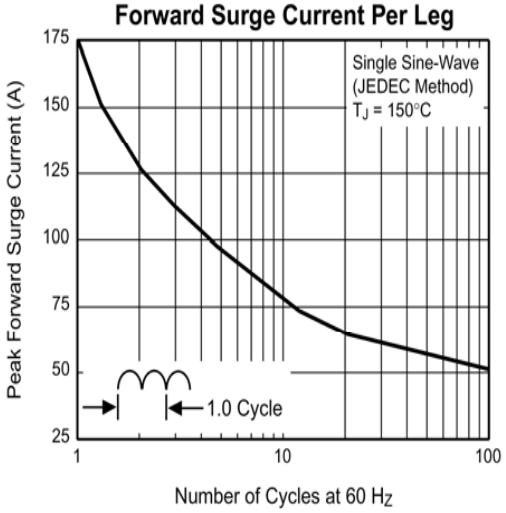


Fig. 3 – Typical Forward Characteristics Per Leg

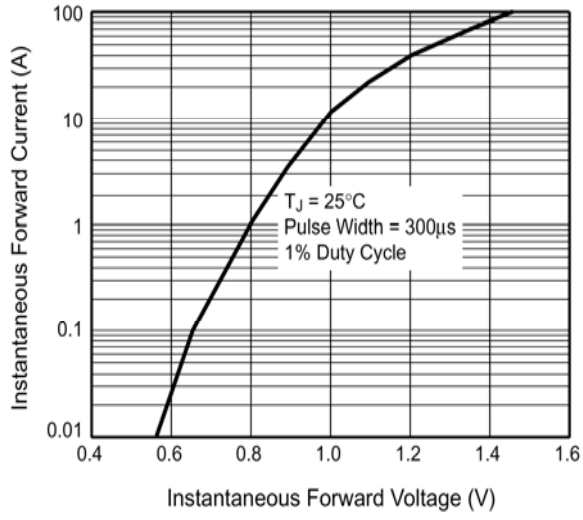


FIG. 4 – TYPICAL REVERSE CHARACTERISTICS
PER BRIDGE ELEMENT