



# KBL601 THRU KBL610

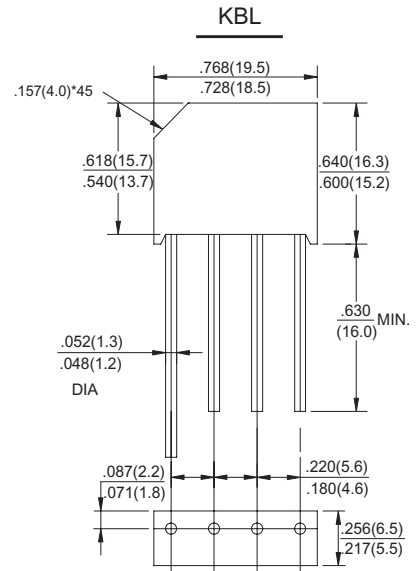
**BRIDGE RECTIFIER**  
 Reverse Voltage: 100 to 1000 Volts  
 Forward Current: 6.0 Amps

## FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- Rating to 1000V PRV
- Ideal for printed circuit board
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU

## MECHANICAL DATA

- Case: KBL molded plastic body
- Terminals: Plated leads solderable per MIL-STD-750, method 2026
- Mounting Position: Any



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbols	KBL601	KBL602	KBL604	KBL606	KBL608	KBL610	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current	$I_{(AV)}$	6.0						Amp
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	200						Amps
Rating for fusing ( $t \leq 8.3ms$ )	$I^2t$	166						$A^2s$
Maximum Instantaneous Forward Voltage at 6.0 A DC	$V_F$	1.05						Volts
Maximum DC Reverse Current at rated DC blocking voltage	$T_A=25^\circ C$	10						$\mu A$
	$T_A=125^\circ C$							1
Typical thermal resistance (Note 1)	$R_{\theta JA}$	13						$^\circ C/W$
Operating temperature range	$T_J$	-55 to +150						$^\circ C$
Storage temperature range	$T_{STG}$	-55 to +150						$^\circ C$

Note: 1. Thermal resistance junction to ambient with units mounted on 3.0×3.0×0.11" thick aluminum plate

# RATINGS AND CHARACTERISTIC CURVES KBL601 THRU KBL610

FIG.1-MAXIMUM FORWARD SURNGE CURRENT

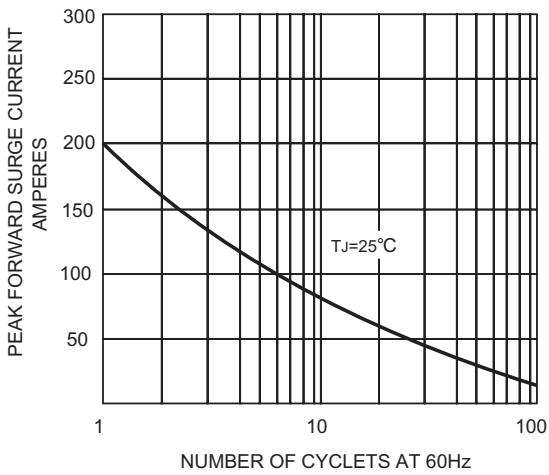


FIG.2-DERATING CURVE  
OUTPUT RECTIFIED CURRENT

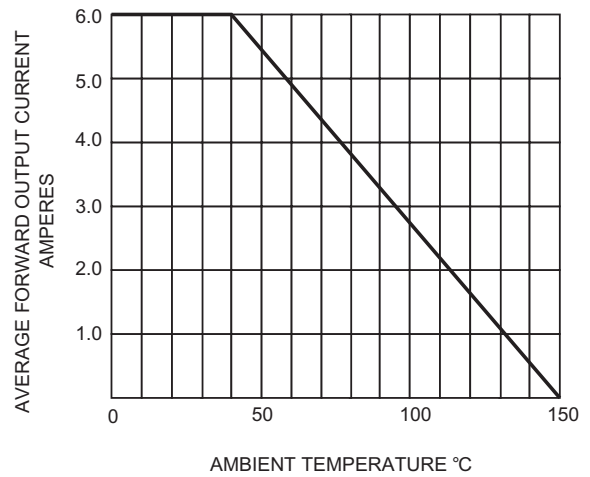


FIG.3-TYPICAL FORWARD CHARACTERISTICS

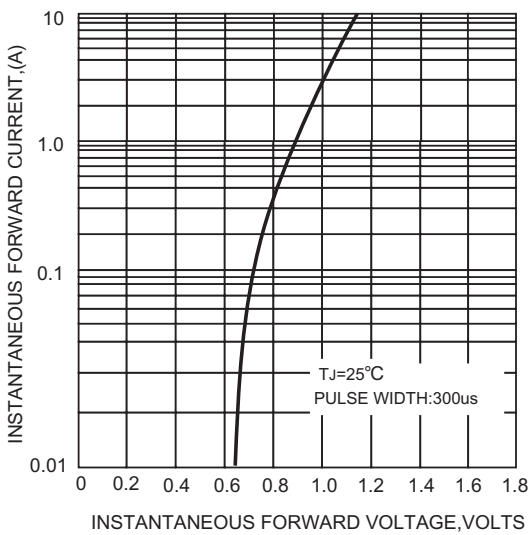


FIG.4 -TYPICAL REVERSE CHARACTERISTICS

