



**THE DATASHEET OF
KBL601**



**SINGLE-PHASE GLASS PASSIVATED
SILICON BRIDGE RECTIFIER**
VOLTAGE RANGE 50 to 1000 Volts CURRENT 6.0 Amperes

FEATURES

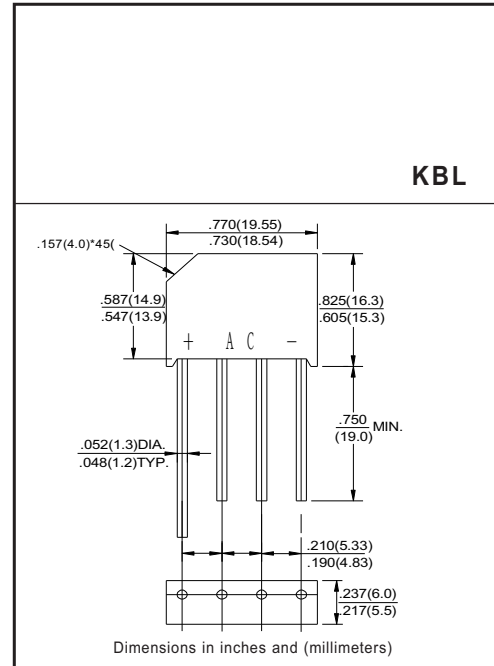
- * Silver-plated copper leads
- * Surge overload rating: 150 amperes peak
- * Low leakage
- * Mounting position: Any
- * Low forward voltage

MECHANICAL DATA

- * Epoxy: Device has UL flammability classification 94V-0

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
resistive or inductive load.



MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	KBL601	KBL602	KBL603	KBL604	KBL606	KBL608	KBL610	UNITS	
Maximum Recurrent 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 Current at T _C = 75 °C	I _O	6.0							Amps	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}					150				Amps
Current Squared Time	I ² T					93.3				A ² S
Typical Thermal Resistance (Note 1)	R _{θJC}					3.1				°C/W
	R _{θJA}					8.6				
Operating and Storage Temperature Range	T _J , T _{STG}					-55 to + 150			°C	

ELECTRICAL CHARACTERISTICS (@TA=25 °C unless otherwise noted)

CHARACTERISTICS	SYMBOL	KBL601	KBL602	KBL603	KBL604	KBL606	KBL608	KBL610	UNITS	
Maximum Instantaneous Forward Voltage at 6.0A DC	V _F					1.1				Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R					10				uAmps
						1000				

- NOTES : 1. Thermal Resistance : Heat-sink case mounted or if PCB mounted.
2. "ROHS compliant"
3. Measured at 1MHz and applied reverse voltage of 4.0 volts.

RATING AND CHARACTERISTICS CURVES (KBL601 THRU KBL610)

FIG.1-MAXIMUM FORWARD SURGE CURRENT

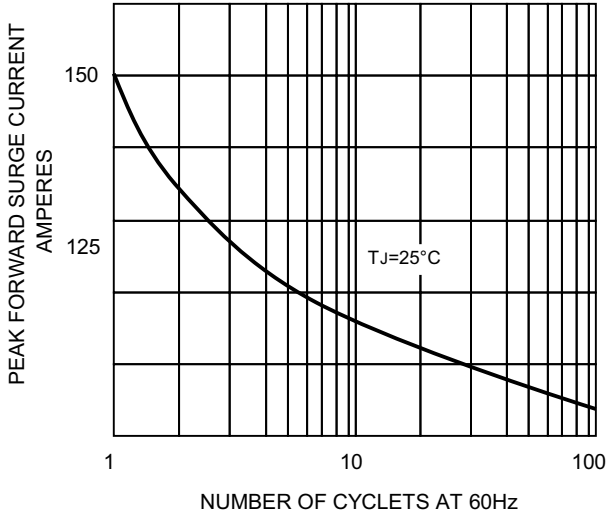


FIG.1-DERATING CURVE
OUTPUT RECTIFIED CURRENT

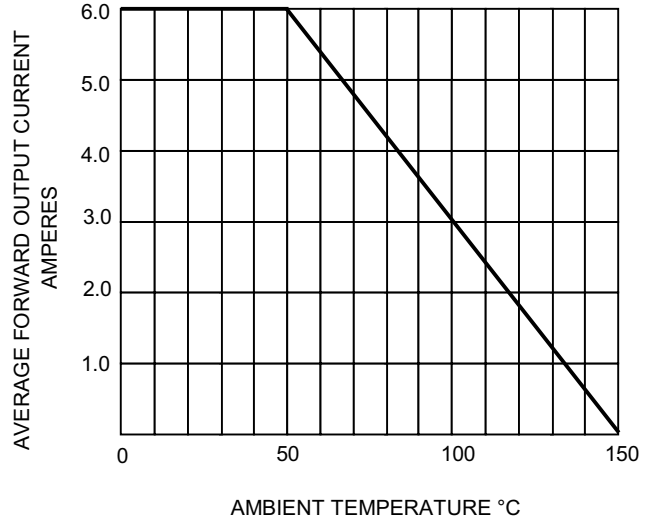


FIG.4-TYPICAL FORWARD CHARACTERISTICS

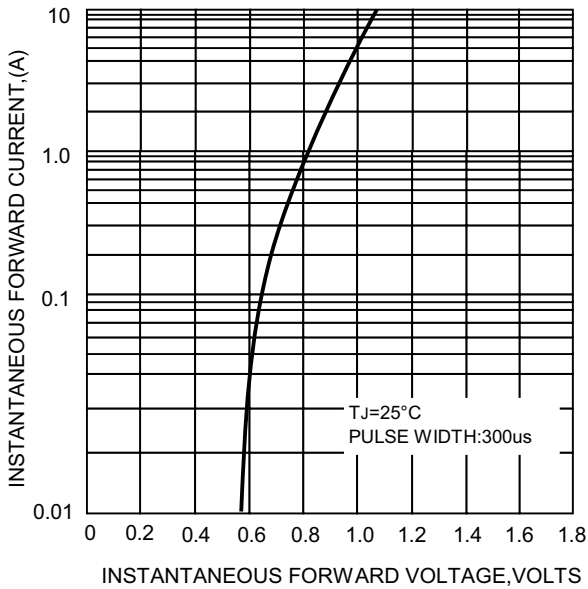
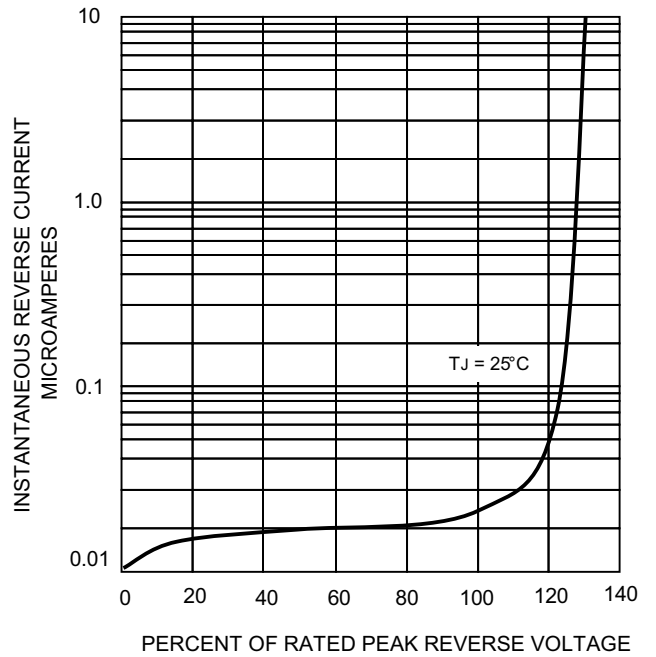
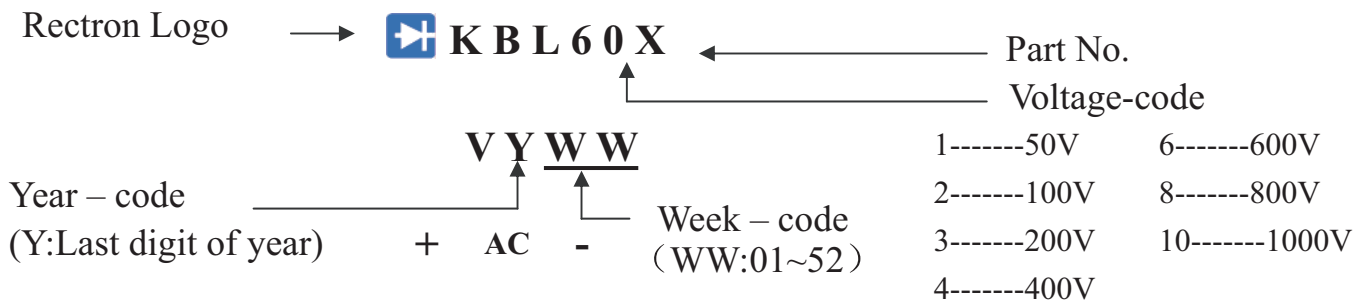


FIG.4- TYPICAL REVERSE CHARACTERISTICS



Marking Description



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

TUBE PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON
KBL	-C	1,150	49*14.5*13.2	49.5*32.5*15.5	2,300



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