

KBL601 THRU KBL610

SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 6.0 Amperes

FEATURES

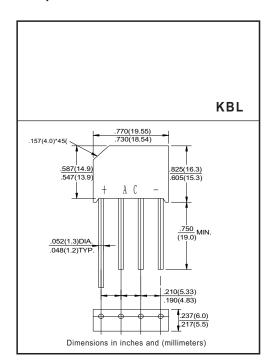
- * Silver-plated copper leads
- * Surge overload rating: 150 amperes peak
- * Low leakage
- * Mounting position: Any
- * Low forward voltage

MECHANICAL DATA

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

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	lo	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^2T	93.3				A ² S			
Tunical Thornal Desistance (Note 4)	R _θ JC	3.1							
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	8.6							°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to + 150				°C			

$\textbf{ELECTRICAL CHARACTERISTICS} (@T_A = 25 \ ^{\circ}\text{C unless otherwise noted})$

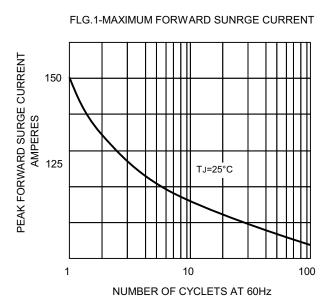
CHARACTERISTICS		SYMBOL	KBL601	KBL602	KBL603	KBL604	KBL606	KBL608	KBL610	UNITS
Maximum Instantaneous Forward Voltage at 6.0A DC		V _F	1.1							Volts
Maximum DC Reverse Current @TA = 25°C		lo.	10							
at Rated DC Blocking Voltage	@T _A = 150°C	IR IR	1000							uAmps

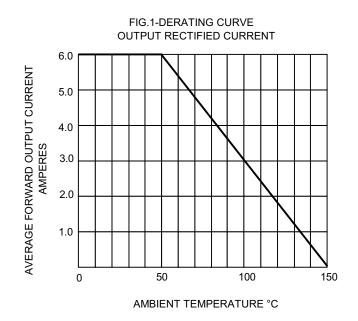
NOTES: 1. Thermal Resistance: Heat-sink case mounted or if PCB mounted.

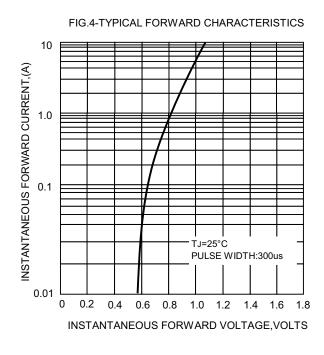
- 2. "ROHS compliant"
- Measureed at 1MHz and applied reverse voltage of 4.0 volts.

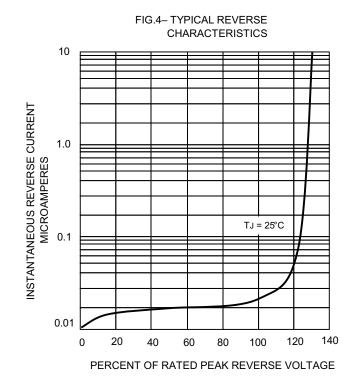
2020-04/10 REV:A

RATING AND CHARACTERISTICS CURVES (KBL601 THRU KBL610)



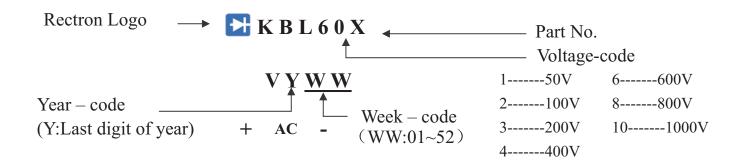








Marking Description





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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