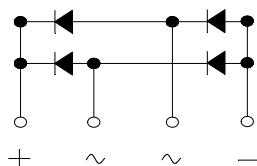
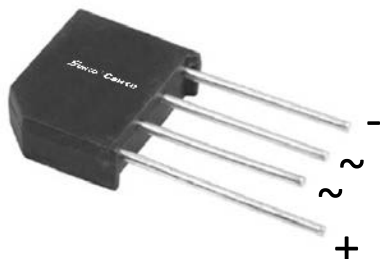


Bridge Rectifiers



Features

- UL recognition, file #E230084
- Glass passivated chip junction
- Ideal for printed circuit boards
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

General purpose use in AC/DC bridge full wave rectification for switching power supply, home appliances, office equipment, industrial automation applications.

Mechanical Data

- **Package:** KBL
Molding compound meets UL 94 V-0 flammability rating, -
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked on body

■ Maximum Ratings ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	KBL6005	KBL601	KBL602	KBL604	KBL606	KBL608	KBL610
Device marking code			KBL6005	KBL601	KBL602	KBL604	KBL606	KBL608	KBL610
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	V_{RMS}	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage	V_{DC}	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load, $T_c=105^{\circ}\text{C}$	I_O	A	6.0						
Forward Surge Current (Non-repetitive) @8.3ms, Half-sine wave, 1 cycle, $T_j=25^{\circ}\text{C}$	I_{FSM}	A	135						
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, $T_j=25^{\circ}\text{C}$			270						
Current Squared Time @1ms≤t≤8.3ms, $T_j=25^{\circ}\text{C}$, Rating of per diode	I^2t	A^2S	76						
Storage temperature	T_{stg}	$^{\circ}\text{C}$	-55 ~ +150						
Junction temperature	T_j	$^{\circ}\text{C}$	-55 ~ +150						

■ Electrical Characteristics ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	KBL6005	KBL601	KBL602	KBL604	KBL606	KBL608	KBL610
Maximum instantaneous forward voltage drop per diode	V_F	V	$I_{FM}=3.0\text{A}$	1.0						
Maximum DC reverse current at rated DC blocking voltage per diode	I_R	μA	$T_j=25^{\circ}\text{C}$	5						
			$T_j=125^{\circ}\text{C}$	100						
Typical junction capacitance	C_j	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	36						

KBL6005 THRU KBL610

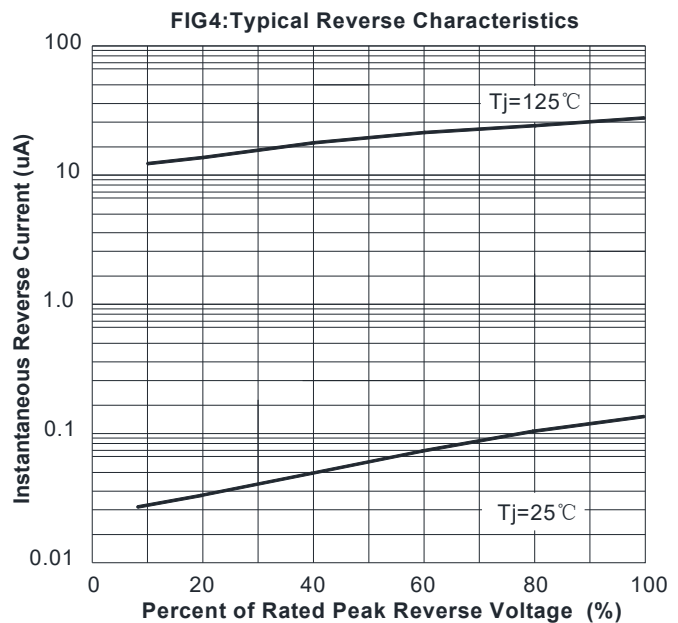
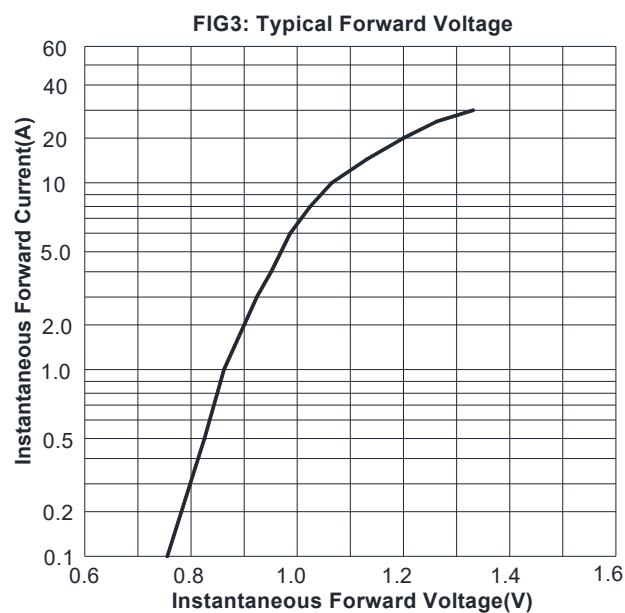
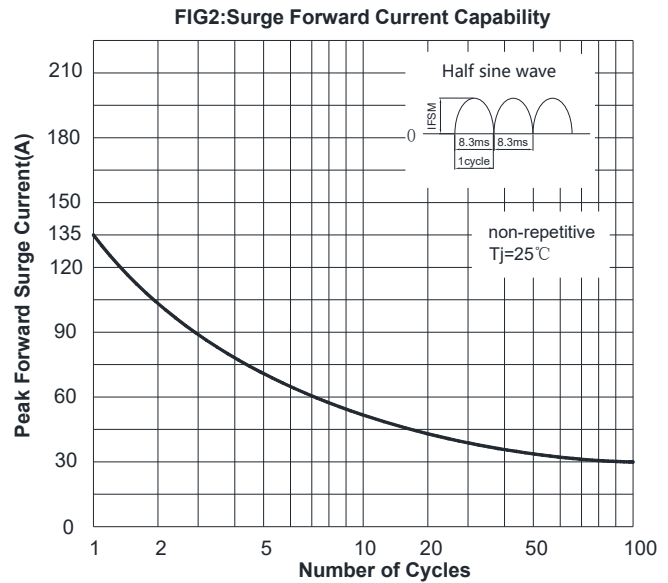
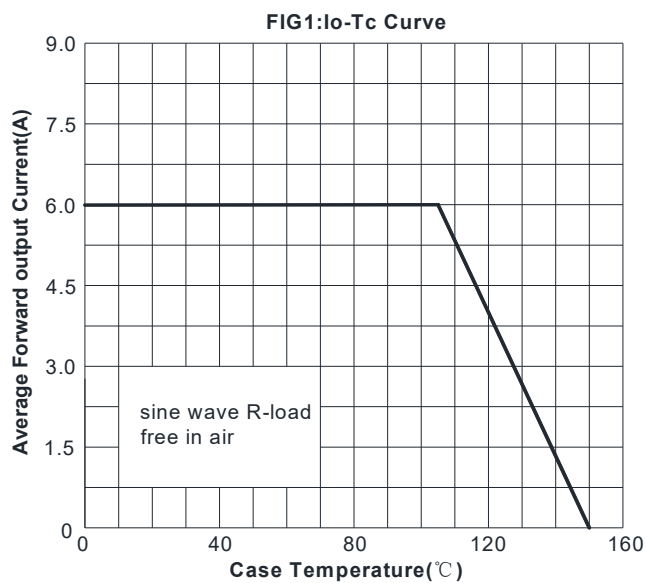
■ Thermal Characteristics ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	KBL6005	KBL601	KBL602	KBL604	KBL606	KBL608	KBL610
Thermal Resistance	Between junction and ambient	$R_{\theta J-A}$	$^{\circ}\text{C/W}$	25						
	Between junction and lead	$R_{\theta J-L}$		13						
	Between junction and case	$R_{\theta J-C}$		3.5						

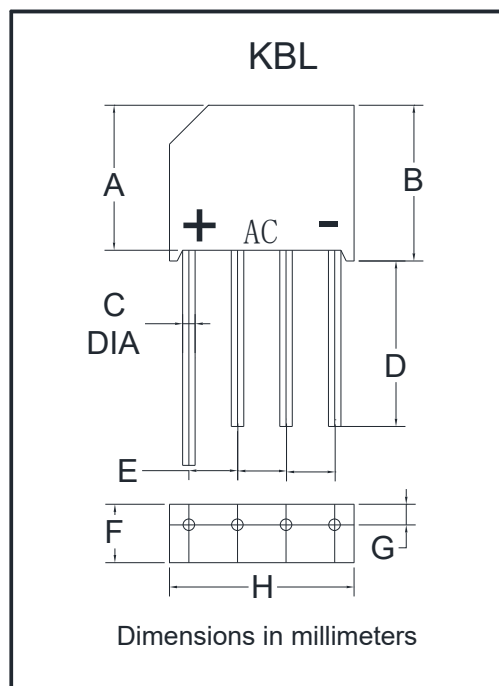
■ Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
KBL6005 ~ KBL610	A1	Approximate 4.54	500	500	4000	Paper Box

■ Characteristics (Typical)



■ Outline Dimensions



KBL		
Dim	Min	Max
A	13.7	15.7
B	15.2	16.3
C	1.2	1.3
D	16	/
E	4.6	5.6
F	5.5	6.5
G	1.8	2.4
H	18.5	19.5

Disclaimer

The information presented in this document is for reference only. Shanghai Sunco Electronics Co., Ltd reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Russiansunco or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.russiansunco.com](http://www.russiansunco.com) , or consult your nearest Russiansunco's sales office for further assistance.