CUMSUMI®

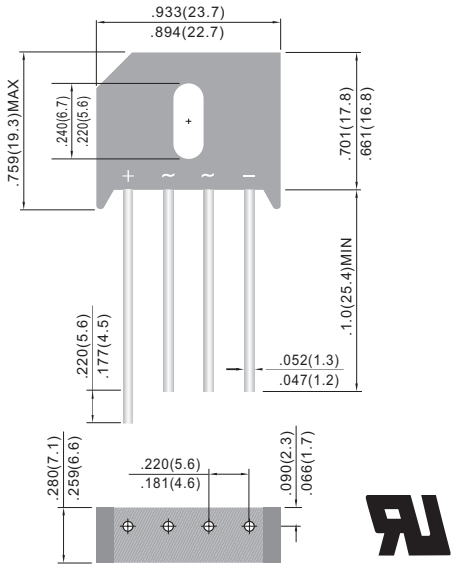
RoHS compliant

SINGLE – PHASE BRIDGE RECTIFIERS
Reverse Voltage – 50 to 1000 Volts
Forward Current – 8.0 Amperes

Features

- ✧ High surge current capability
- ✧ Ideal for printed circuit board
- ✧ Reliable low cost construction technique results in inexpensive product
- ✧ High temperature soldering guaranteed: 260℃ / 10 seconds / 0.375" (9.5mm) lead length at 5 lbs., (2.3 kg) tension
- ✧ Weight: 8 grams

KBU — Unit: inch (mm)



Absolute Maximum Ratings*

T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
I_O	Average Rectified Current @ T_A = 50°C	8.0	A
$i_{f(surge)}$	Peak Forward Surge Current	300	A
P_D	Total Device Dissipation Derate above 25°C	6.9 55	W mW/°C
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient,** per leg	18	°C/W
$R_{\theta JL}$	Thermal Resistance, Junction to Lead,** per leg	3.0	°C/W
T_{stg}	Storage Temperature Range	-55 to +150	°C
T_J	Operating Junction Temperature	-55 to +150	°C

*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

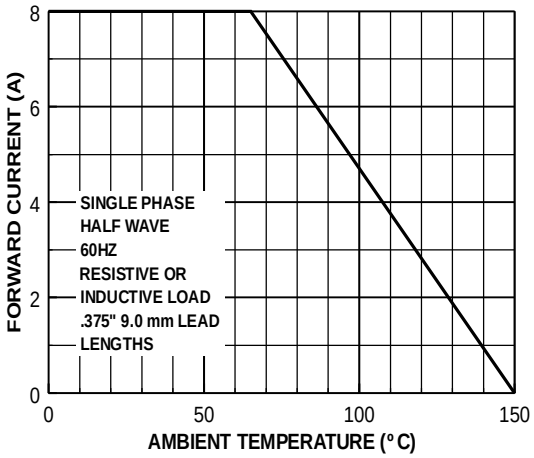
**Device mounted on PCB with 0.375 " (9.5 mm) lead length and 0.5 x 0.5" (13 x 13 mm) copper pads.

Electrical Characteristics

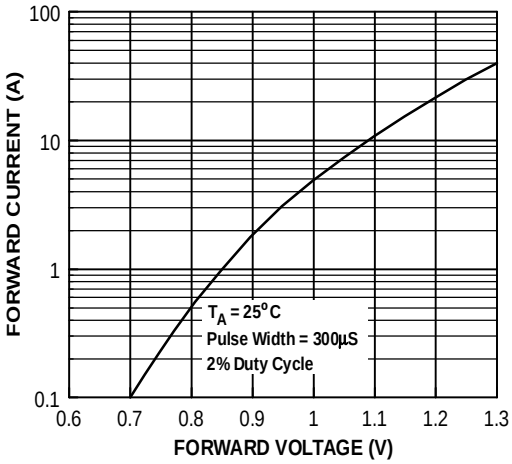
T_A = 25°C unless otherwise noted

Parameter	Device							Units
	8005	801	802	804	806	808	810	
Peak Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	35	70	140	280	420	560	700	V
DC Reverse Voltage (Rated V_R)	50	100	200	400	600	800	1000	V
Maximum Reverse Leakage, total bridge @ rated V_R T_A = 25°C T_A = 100°C	10 500							µA µA
Maximum Forward Voltage Drop, per bridge @ 8.0 A	1.0							V

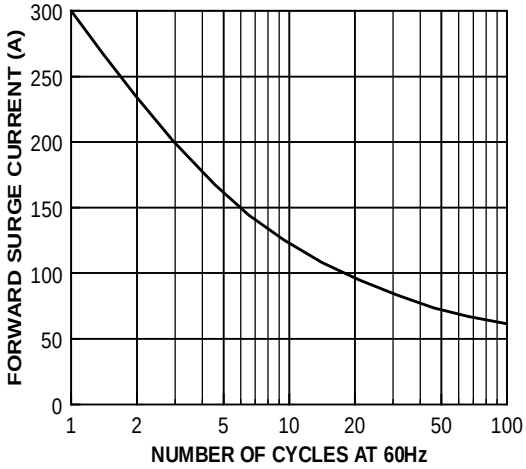
Forward Current Derating Curve



Forward Characteristics



Non-Repetitive Surge Current



Reverse Characteristics