## Single Phase 4.0Amp Glass Passivated Bridge Rectifiers

#### **Features**

The plastic package carries Underwriters Laboratory

Flammability Classification 94V-0

Idea for printed circuit board

Glass passivated junction chip

Low reverse leakage

High forward surge current capability

High temperature soldering guaranteed

260°C/10 seconds at terminals

#### **Mechanical Data**

Case: Molded plastic body

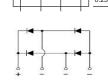
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Polarity symbol marking on body

Mounting Position: Any

### 0.768(19.5) 0.728(18.5) 0.580(14.7) 0.540(13.7) 0.640(16.3) 0.600(15.2) 0.750 (19.0) MIN. 0.220(5.6)

**KBL** 



0.180(4.6)

0.256(6.5)

Dimensions in inches and (millimeters)

#### **Maximum Ratings And Electrical Characteristics**

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz,resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	KBL410	UNITS
Maximum repetitive peak reverse voltage	Vrrm	1000	V
Maximum RMS voltage	VRMS	700	V
Maximum DC blocking voltage	VDC	1000	V
Maximum average forward rectified current with heatsink	l(AV)	4.0	А
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	lfsm	120.0	А
Rating for fusing (t=8.3ms, Ta=25 °C)	l²t	59.8	A <sup>2</sup> s
Maximum instantaneous forward voltage at 4.0A	VF	1.10	V
Maximum DC reverse current T = 25°C at rated DC blocking voltage Ta=100°C	lR	5.0 200	u A
Typical junction capacitance (Note 1)	Cì	38.0	pF
Typical thermal resistance	RqJA	55.0	°C/W
Operating junction and storage temperature range	ТЈ,Тѕтс	-55 to +150	°C

Note: 1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

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### **Ratings And Characteristic Curves**

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

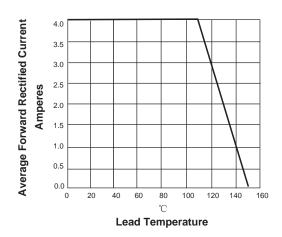


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

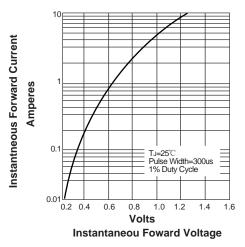


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

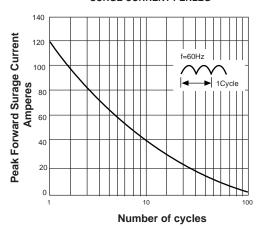
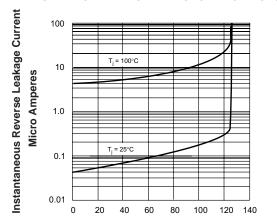


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

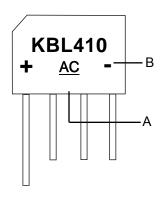


Percent Of Rated Peak Reverse Voltage(%)

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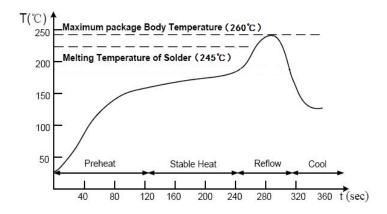


#### Marking



Symbol	Explanation	
Α	Polarity Symbol	
В	Product Name	

### **Suggested Soldering Temperature Profile**



#### Note

Recommended reflow methods: IR, vapor phase oven, hot air oven, wave solder.

The device can be exposed to a maximum temperature of 260°C for 10 seconds.

Devices can be cleaned using standard industry methods and solvents.

If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

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