Single Phase Glass Passivated Silicon Bridge Rectifier

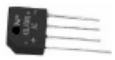
V_{RRM} = 600 V - 1000 V

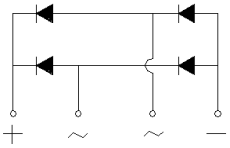
I_O = 4 A

Features

- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- High surge current capability
- Silver plated copper leads
- Types from 50 V to 400 V V_{RRM}
- Not ESD Sensitive

KBL Package





Mechanical Data

Case: Molded plastic

Terminals: Plated terminals, solderable per MIL-STD-202F, Method 208

Polarity: Marked on body

Weight: 0.167 ounce, 5 grams

Mounting position: Any

Maximum ratings at Ta = 25 °C (ambient temperature), unless otherwise specified

Parameter	Symbol	Conditions	KBL406G	KBL408G	KBL410G	Unit
Repetitive peak reverse voltage	V_{RRM}		600	800	1000	V
RMS reverse voltage	V_{RMS}		420	560	700	V
DC blocking voltage	V_{DC}		600	800	1000	V
Operating temperature	T_j		-50 to 150	-50 to 150	-50 to 150	°C
Storage temperature	T_{stg}		-50 to 150	-50 to 150	-50 to 150	°C

Electrical characteristics at Ta = 25 °C, unless otherwise specified

Single phase, half sine wave, 60 Hz, resistive or inductive load

For capacitive load derate current by 20%

Parameter	Symbol	Conditions	KBL406G	KBL408G	KBL410G	Unit
Maximum average forward rectified current	I_O	T_a = 50 °C	4	4	4	A
Peak forward surge current	I_{FSM}	single sine-wave	120	120	120	A
Maximum instantaneous forward voltage per leg	V_F	I_F = 4 A	1.1	1.1	1.1	V
Maximum reverse current at rated DC blocking voltage per leg	I_R	T_a = 25 °C	5	5	5	µA
		T_a = 125 °C	100	100	100	

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIER CURRENT

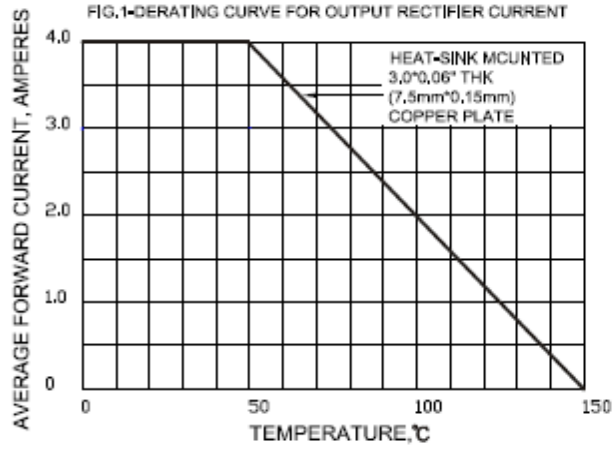


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

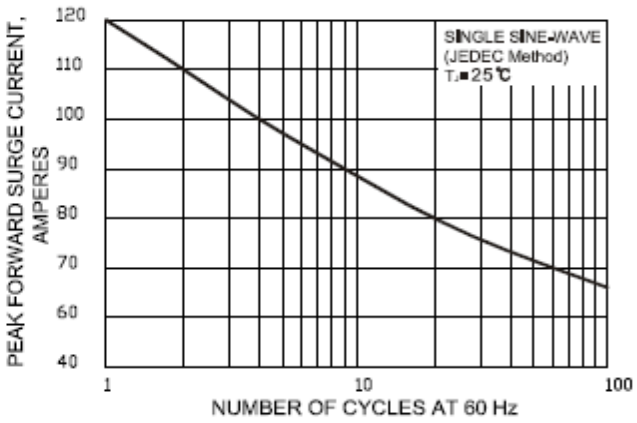


FIG.3-TYPICAL REVERSE LEAKAGE CHARACTERISTICS
PER BRIDGE ELEMENT

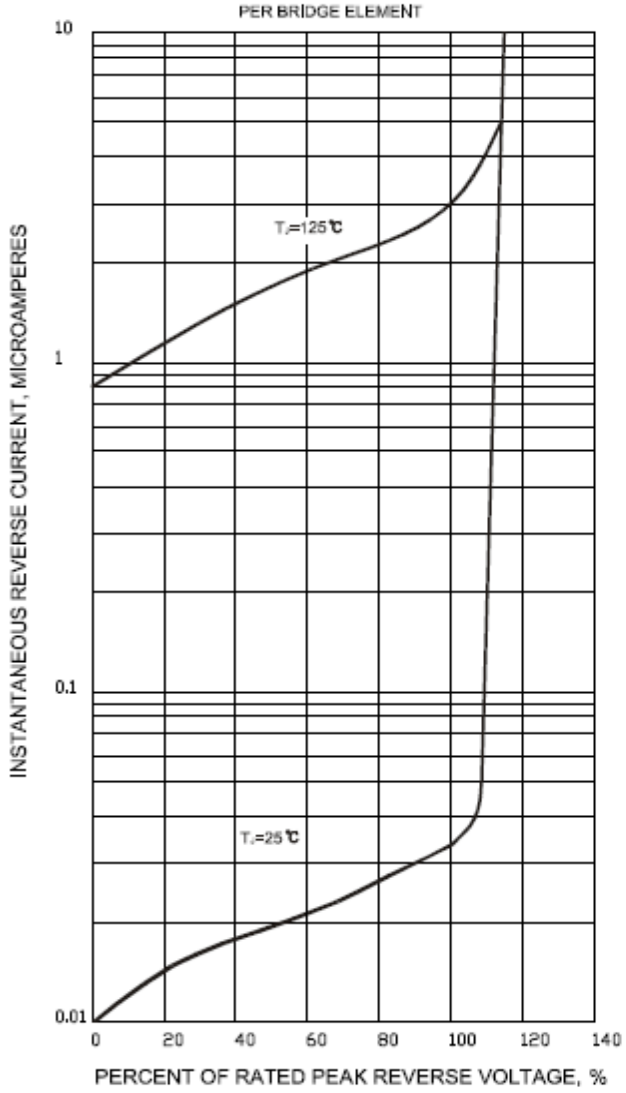


FIG.4-TYPICAL FORWARD CHARACTERISTICS
PER BRIDGE ELEMENT

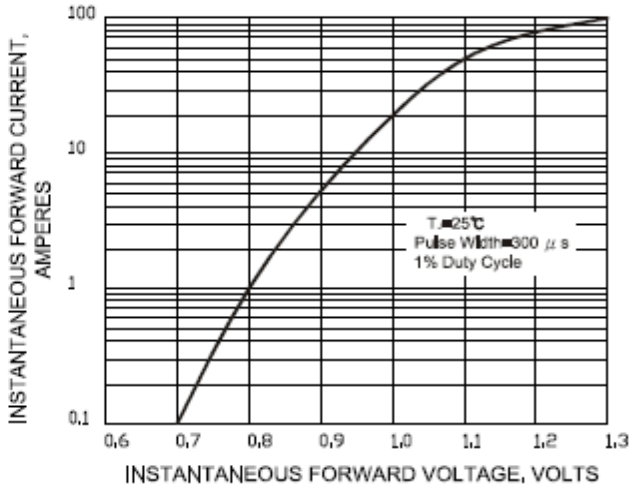
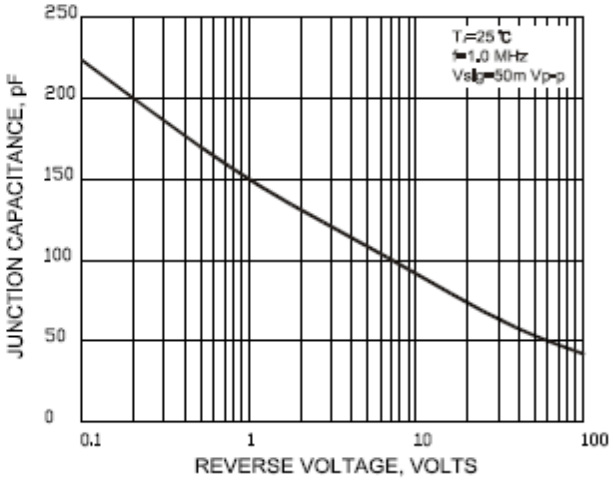
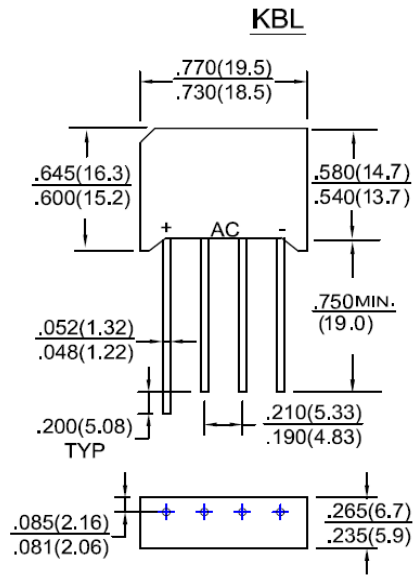


FIG.5-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT



Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



Dimensions in inches and (millimeters)