KBL4005 THRU KBL410

SINGLE-PHASE BRIDGE RECTIFIER

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 4.0 Ampere

FEATURES

◆High forward surge current capability.

◆Ideal for printed circuit board.

◆High temperature soldering guaranteed:

260℃/10 second, 0.375" (9.5mm) lead length

at 5 lbs. (2.3kg) tension.

◆Electrically isolated base-1500 Volts.

Mechanical Data

◆Case: Transfer molded plastic.

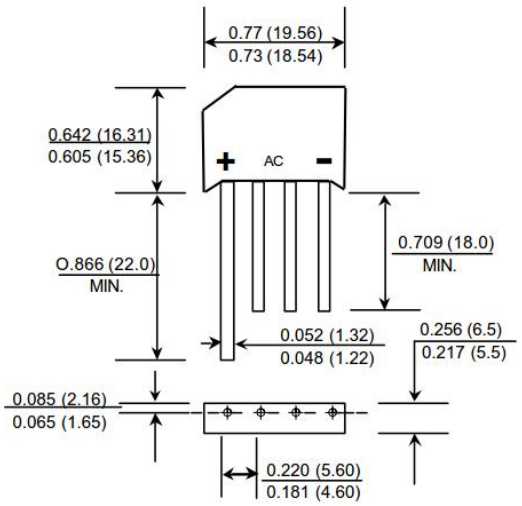
◆Terminal: Lead solderable per MIL - STD - 202E

method 208℃.

◆Mounting position: Any.

◆Weight: 0.22 ounce, 6.21 gram.

KBL



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	KBL4005	KBL401	KBL402	KBL404	KBL406	KBL408	KBL410	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Input Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Output Current at 40℃ T_A (Note 1)	$I_{(AV)}$	4.0							A
Peak Forward Surge Current 8.3ms single half sine-wave Super Imposed on Rated Load	I_{FSM}	150							A
Maximum forward Voltage Drop Per Element at 4.0A Peak	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking voltage	I_R	5.0							μA
Maximum Reverse Current at Rated DC Blocking voltage and 150℃ T_A	I_R	1.0							mA
Operating Temperature RangeTJ	T_J	-65 to +125							℃
Storage Temperature RangeTA	T_{STG}	-65 to +150							℃

Note: 1. Mounting conditions, 0.5" lead length maximum.

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RATING AND CHARACTERISTIC CURVES KBL4005 THRU KBL410

FIG.1-DERATING CURVE FOR OUTPUT RECITIFIED CURRENT

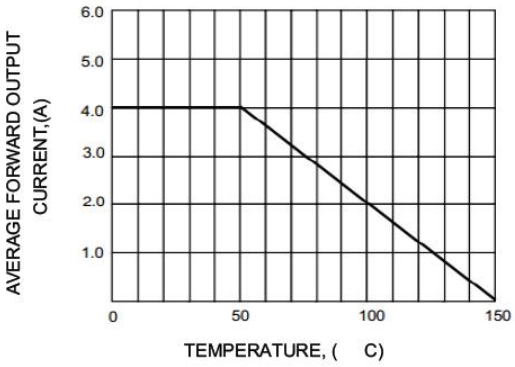


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

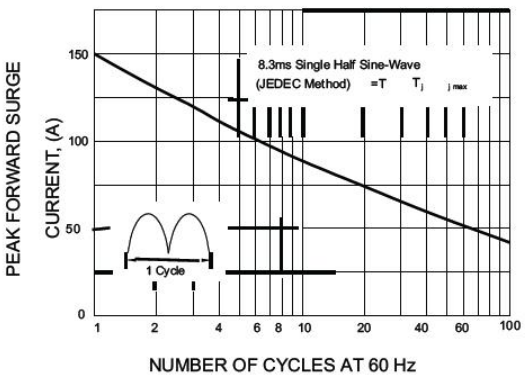


FIG.3-TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

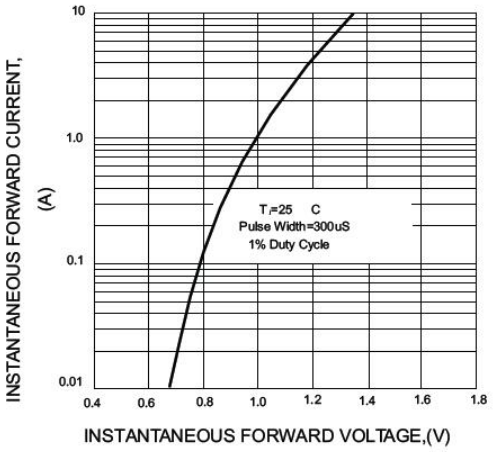


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

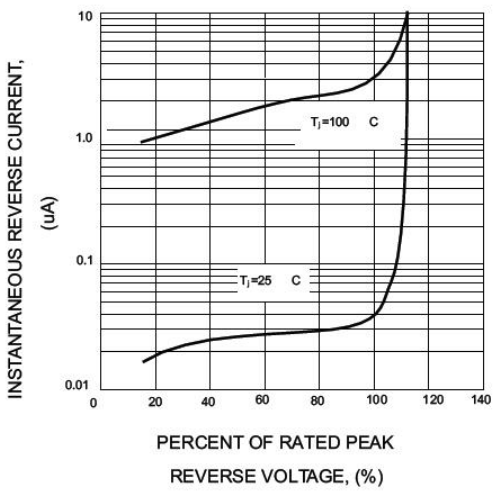
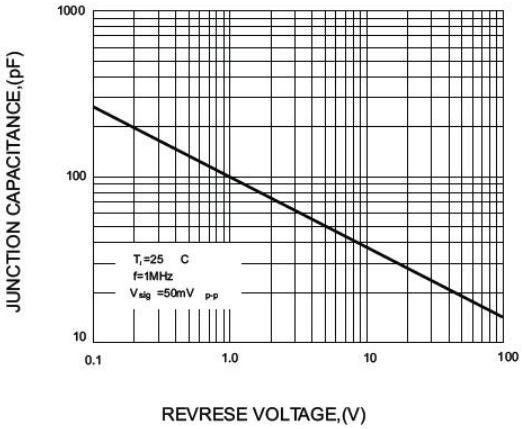


FIG.5-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.