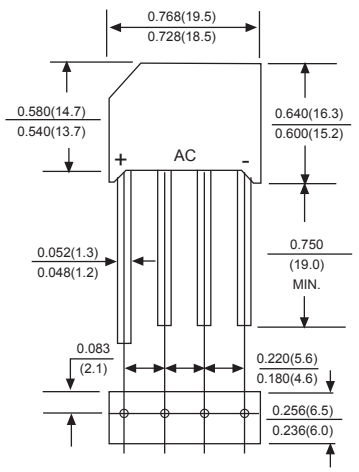
KBL4005~KBL410

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 250℃/10 seconds at terminals



Dimensions in inches and (millimeters)

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

Maximum Ratings And Electrical Characteristics

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

	SYMBOLS	KBL 4005	KBL 401	KBL 402	KBL 404	KBL 406	KBL 408	KBL 410	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current at T_L=50℃	$I_{(AV)}$	4.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	120							Amps
Maximum instantaneous forward voltage at 2.0A	V_F	1.1							Volts
Maximum DC reverse current T_A =25℃ at rated DC blocking voltage T_A=125℃	I_R	5.0 500							uA
Typical junction capacitance (Note 1)	C_J	25.0							pF
Typical thermal resistance (Note 2)	R_{qJA}	16							°C/W
Operating junction and storage temperature range	T_J,T_{STG}	-50 to +150							°C

Note: 1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2.Mounted on PCB with 12*12mm copper pad

Ratings And Characteristic Curves

KBL4005 THRU KBL410

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

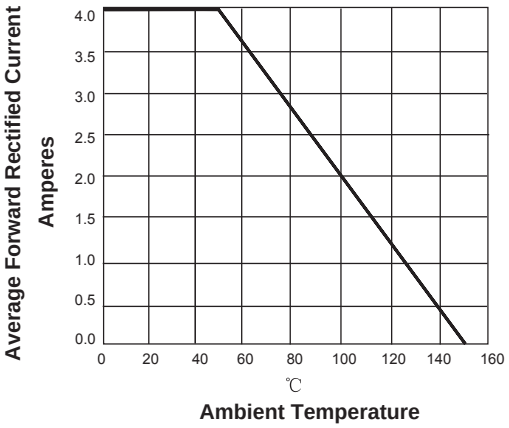


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

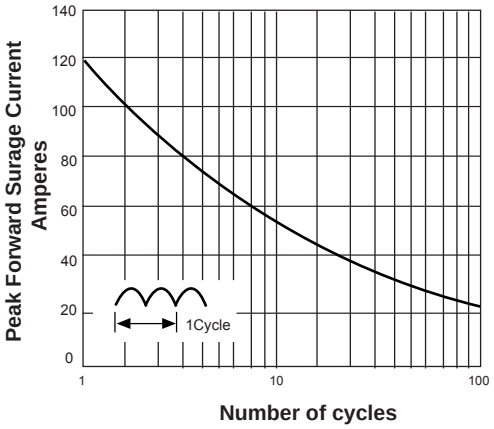


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

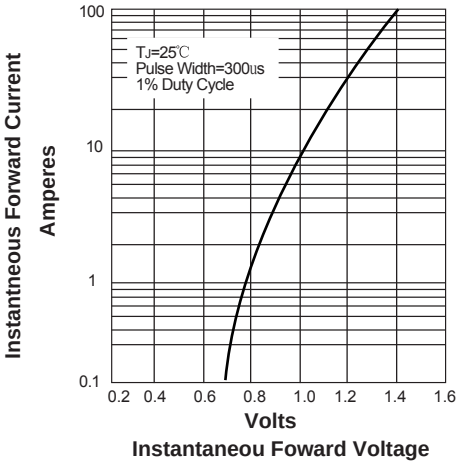


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

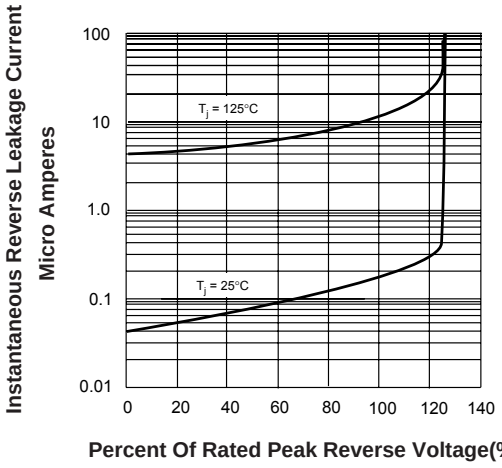


FIG. 5-TYPICAL JUNCTION CAPACTITANE