



SINGLE PHASE BRIDGE RECTIFIER

KBL401 THRU KBL407

VOLTAGE RANGE
CURRENT

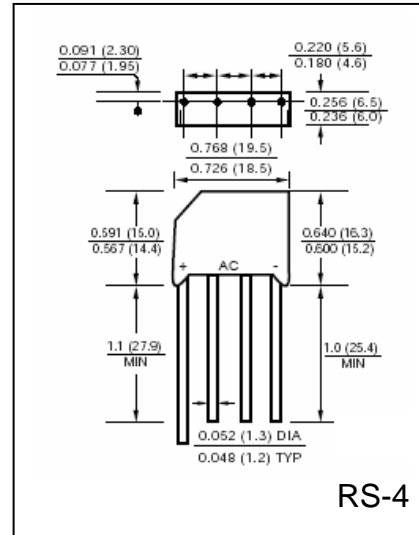
50 to 1000 Volts
4.0 Ampere

FEATURES

- UL recognized
- High forward surge current capability
- High temperature soldering guaranteed:
260°C / 10 seconds

MECHANICAL DATA

- Case: Transfer molded plastic body
- Terminal: Lead solderable per MIL-STD-202E method 208C
- Polarity: Polarity symbols marked on case
- Mounting: Any.
- Weight: 0.22 ounce, 6.21 gram



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 derate current by 20%

		SYMBOLS	KBL 401	KBL 402	KBL 403	KBL 404	KBL 405	KBL 406	KBL 407	UNIT	
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 $T_C = 50^\circ C$	$I_{(AV)}$	4.0							Amps	
	At $T_A = 50^\circ C$		3.0								
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)		I_{FSM}					200				Amps
Rating for Fusing ($t < 8.3mS$)		I^2t					166				A ² s
Maximum Instantaneous Forward Voltage drop per Bridge element 4.0A		V_F					1.0				Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	$T_A = 25^\circ C$	I_R					10				μA
	$T_A = 100^\circ C$						1.0				mA
Typical Junction Capacitance (Measured at 1.0MHz and applied reverse voltage of 4.0V)		C_J					105				pF
Typical Thermal Resistance (Note 1 and 2)		$R_{\theta Jc}$					20				$^\circ C/W$
Operating Junction Temperature Range		T_J					(-65 to +150)			$^\circ C$	
Storage Temperature Range		T_{STG}					(-65 to +150)			$^\circ C$	

Notes:

1. Unit mounted on 3.0" x 3.0" x 0.11" (7.5cm x 7.5cm x 0.3cm) AL plate
2. Unit mounted on PC board 0.375" (9.5mm) lead length with 0.5 "x0.5" (12mm x 12mm) copper pads



RATINGS AND CHARACTERISTIC CURVES KBL401 THRU KBL407

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

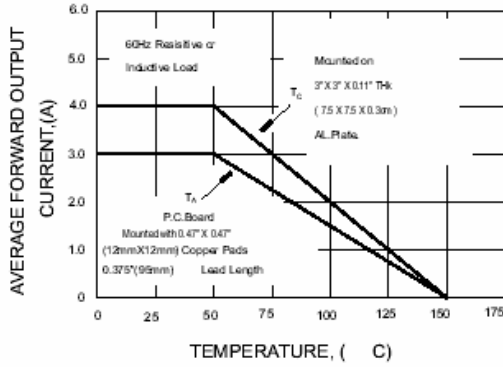


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

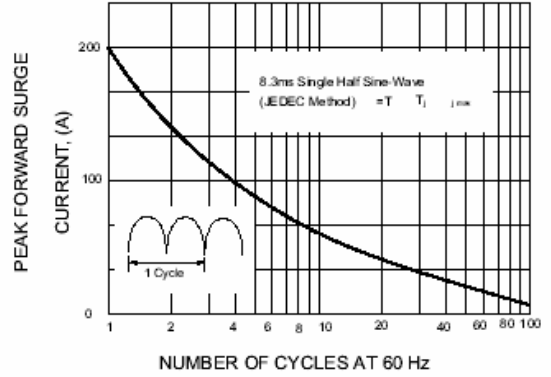


FIG.3-TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

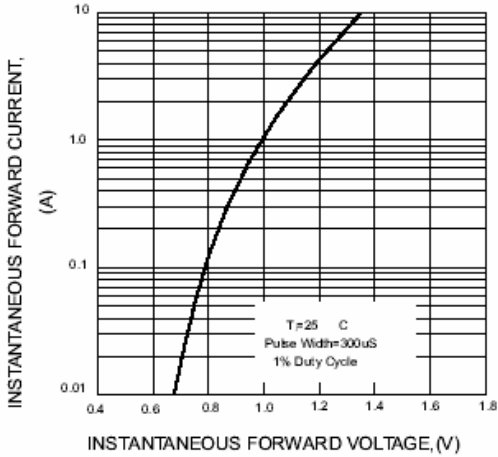


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

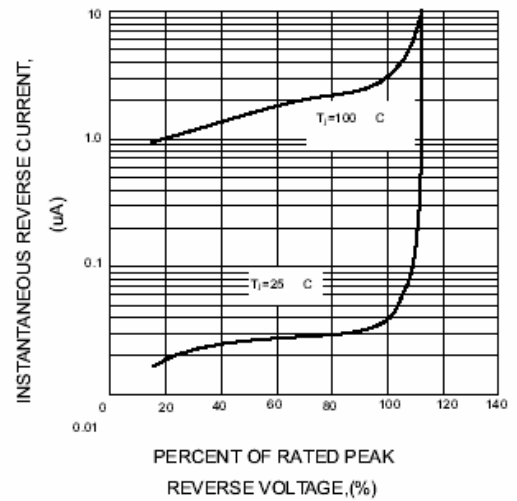


FIG.5-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

