



SINGLE-PHASE BRIDGE RECTIFIER

KBP005	RS201
THRU	THRU
KBP10	RS207

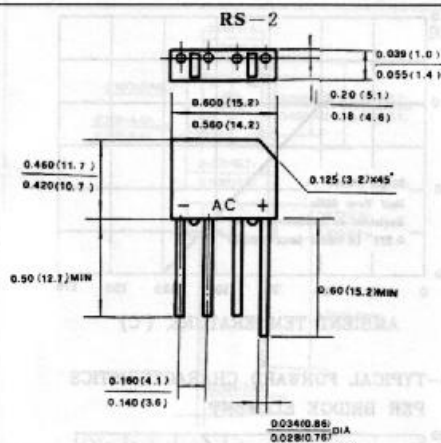
FEATURES

- Low cost
- This series is UL recognized under component index, file number E127707
- High forward surge current capability
- Ideal for printed circuit board
- High temperature soldering guaranteed: 260°C/10 second, 0.375" (9.5mm) lead length at 5 lbs. (2.3kg) tension.

MECHANICAL DATA

- Case: Transfer molded plastic
- Terminal: Lead solderable per MIL-STD-202E method 208C
- Polarity: Polarity symbols marked on case
- Mounting position: Any
- Weight: 0.069 ounce, 1.95 gram

VOLTAGE RANGE 50 to 1000 Volts
CURRENT 2.0 Amperes



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 derate current by 20%.

	SYMBOLS	KBP005 RS201	KBP01 RS202	KBP02 RS203	KBP04 RS204	KBP06 RS205	KBP08 RS206	KBP10 RS207	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 Output Current, at $T_A = 50^\circ\text{C}$ (Note 2)	$I_{(AV)}$	2.0							Amps
Peak Forward Surge Current 8.3ms single half sine—wave superimposed on rated load (JEDEC Method)	I_{FSM}	50							Amps
Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	10							A^2s
Maximum Instantaneous Forward Voltage Drop per bridge element at 1.0A	V_F	1.0							Volts
Maximum DC Reverse Current at rated DC blocking voltage per element	$T_A = 25^\circ\text{C}$	I_R							μAmps
	$T_A = 100^\circ\text{C}$	0.5							mAmps
Typical Junction Capacitance (Note 1)	C_j	20							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	28							$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150							$^\circ\text{C}$

NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Unit mounted on P. C. board with 0.47" x 0.47" (12x12mm) copper pads, 0.375" (9.5mm) lead length.

RATINGS AND CHARACTERISTIC CURVES KBP005 RS201 THRU KBP10 RS207

FIG.1-DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT

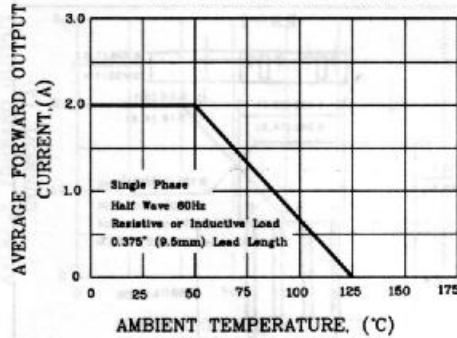


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT PER ELEMENT

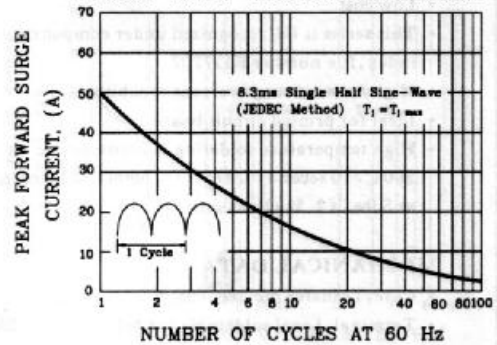


FIG.3-TYPICAL FORWARD CHARACTERISTICS
PER BRIDGE ELEMENT

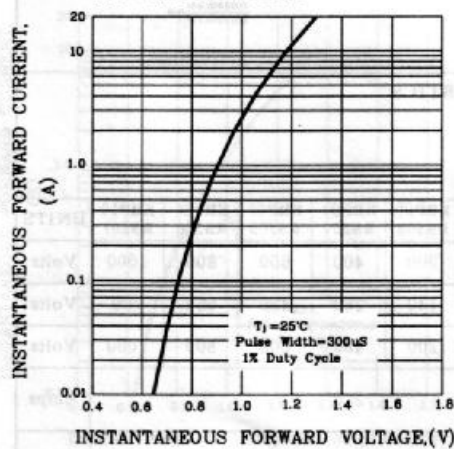


FIG.4-TYPICAL REVERSE CHARACTERISTICS
PER BRIDGE ELEMENT

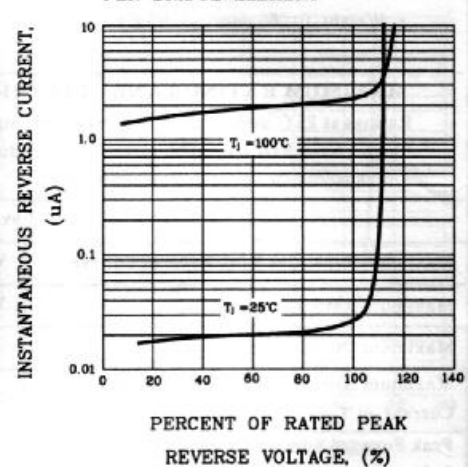


FIG.5-TYPICAL JUNCTION CAPACITANCE
PER BRIDGE ELEMENT

