



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

KBP / RS
005 / 201
THRU
KBP / RS
10 / 207

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 2.0 Amperes

FEATURES

- * Ideal for printed circuit board
- * Surge overload rating: 50 Amperes peak

MECHANICAL DATA

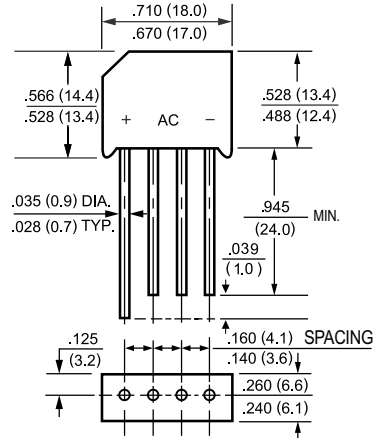
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Symbols molded or marked on body
- * Mounting position: Any
- * Weight: 2.74 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



RS-2



Dimensions in inches and (millimeters)

		SYMBOL	KBP005	KBP01	KBP02	KBP04	KBP06	KBP08	KBP10	UNITS	
			RS201	RS202	RS203	RS204	RS205	RS206	RS207		
Maximum Recurrent Peak Reverse Voltage		VRRM	50	100	200	400	600	800	1000	Volts	
Maximum RMS Bridge Input Voltage		VRMS	35	70	140	280	420	560	700	Volts	
Maximum DC Blocking Voltage		Vdc	50	100	200	400	600	800	1000	Volts	
Maximum Average Forward Output Current TA = 50°C		Io	2.0								Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		IFSM	50								Amps
Maximum Forward Voltage Drop per element at 1.0A DC		VF	1.0								Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	@TA = 25°C	IR	10								uAmps
	@TA = 100°C		500								
I ² t Rating for Fusing (t<8.3ms)		I ² t	10								A ² Sec
Typical Junction Capacitance (Note1)		CJ	15								pF
Operating Temperature Range		TJ	-55 to + 125								°C
Storage Temperature Range		TSTG	-55 to + 150								°C

NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts

2. Thermal Resistance from Junction to Ambient and from junction to lead mounted on P.C.B. with 0.47 x 0.47" (12x12mm) copper pads.

RATING AND CHARACTERISTIC CURVES

(KBP005 THRU KBP10
RS201 RS207)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

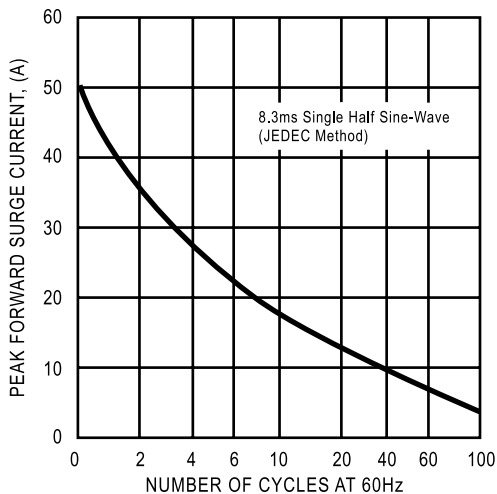


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

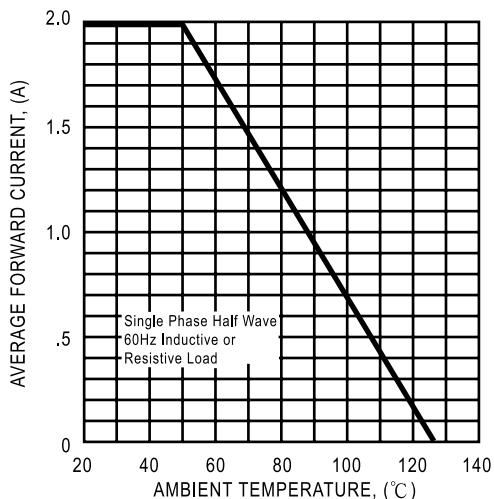


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

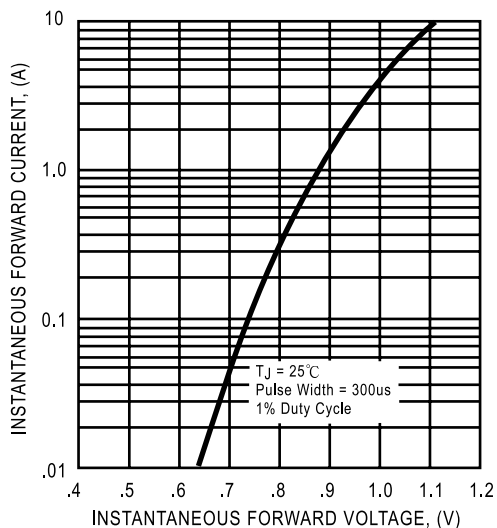
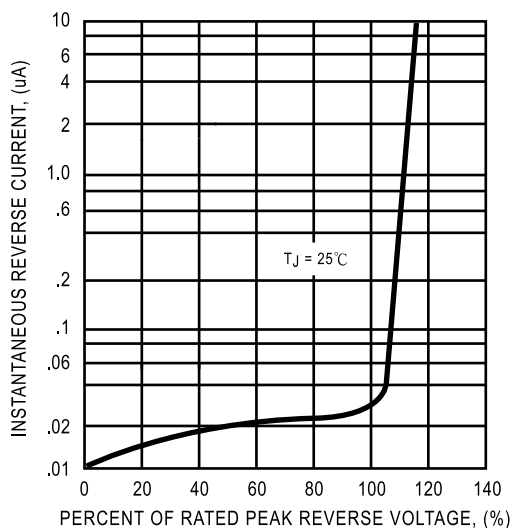


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



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