



FORWARD INTERNATIONAL ELECTRONICS LTD.

**SEMICONDUCTOR  
TECHNICAL DATA**

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**

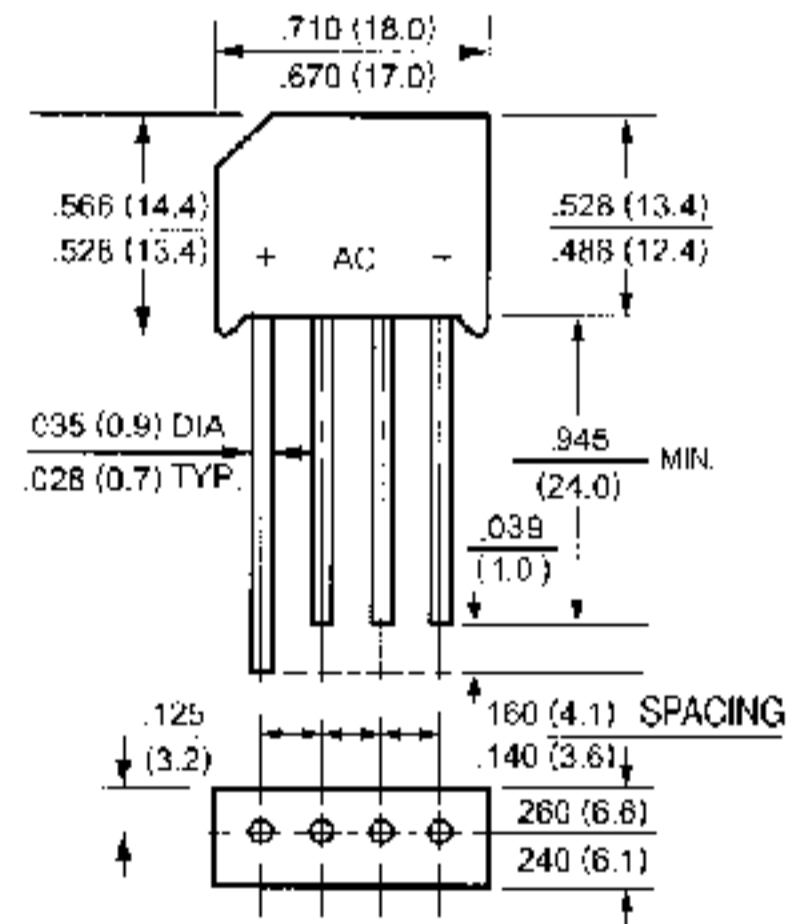
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: MIL-STD-202E, Method 208 guaranteed
- \* Polarity: Symbols molded or marked on body
- \* Mounting position: Any
- \* Weight: 2.74 grams

**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	260	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	IR	10							uAmps
		500							
I <sup>2</sup> t Rating for Fusing (t <sub>1</sub> : 8.3ms)	I <sup>2</sup> t	10							A <sup>2</sup> 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 RS201 THRU KBP10 RS207 )

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

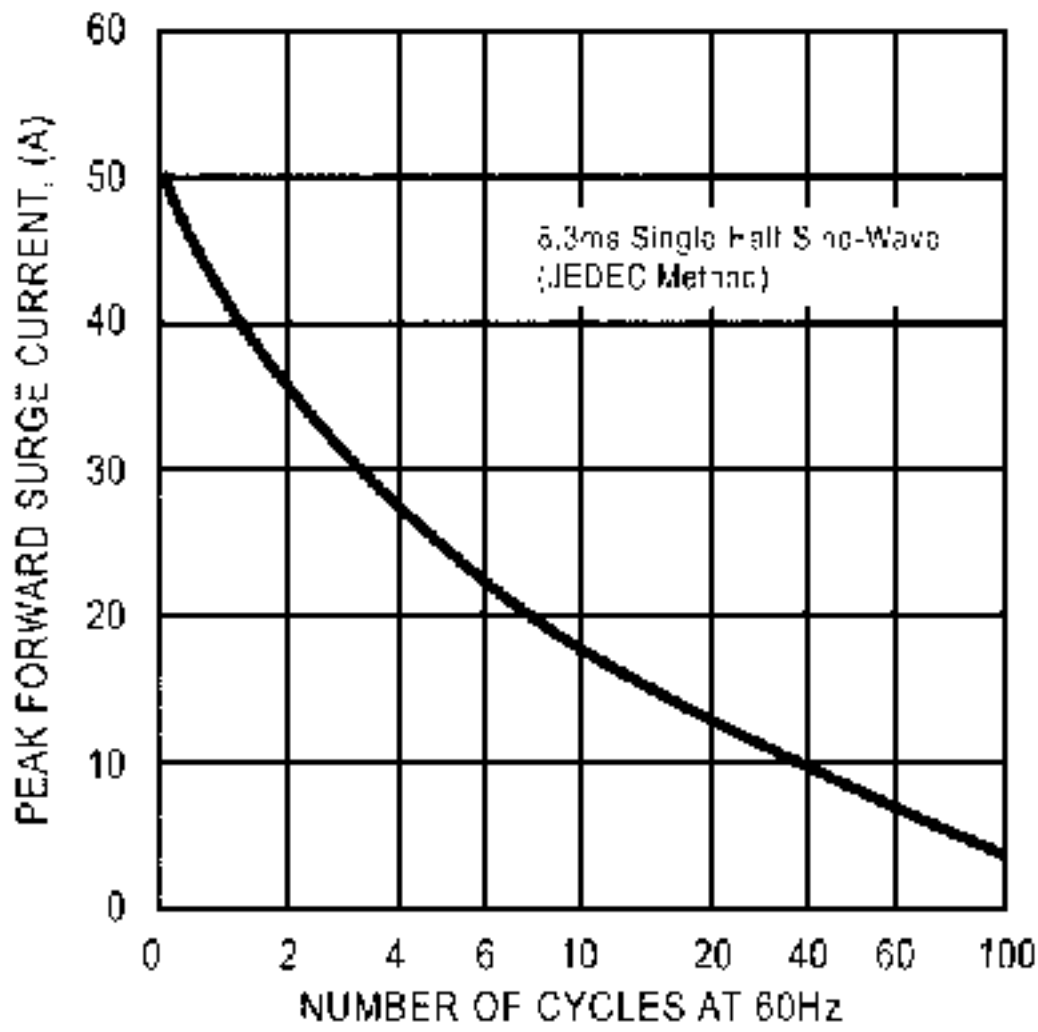


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

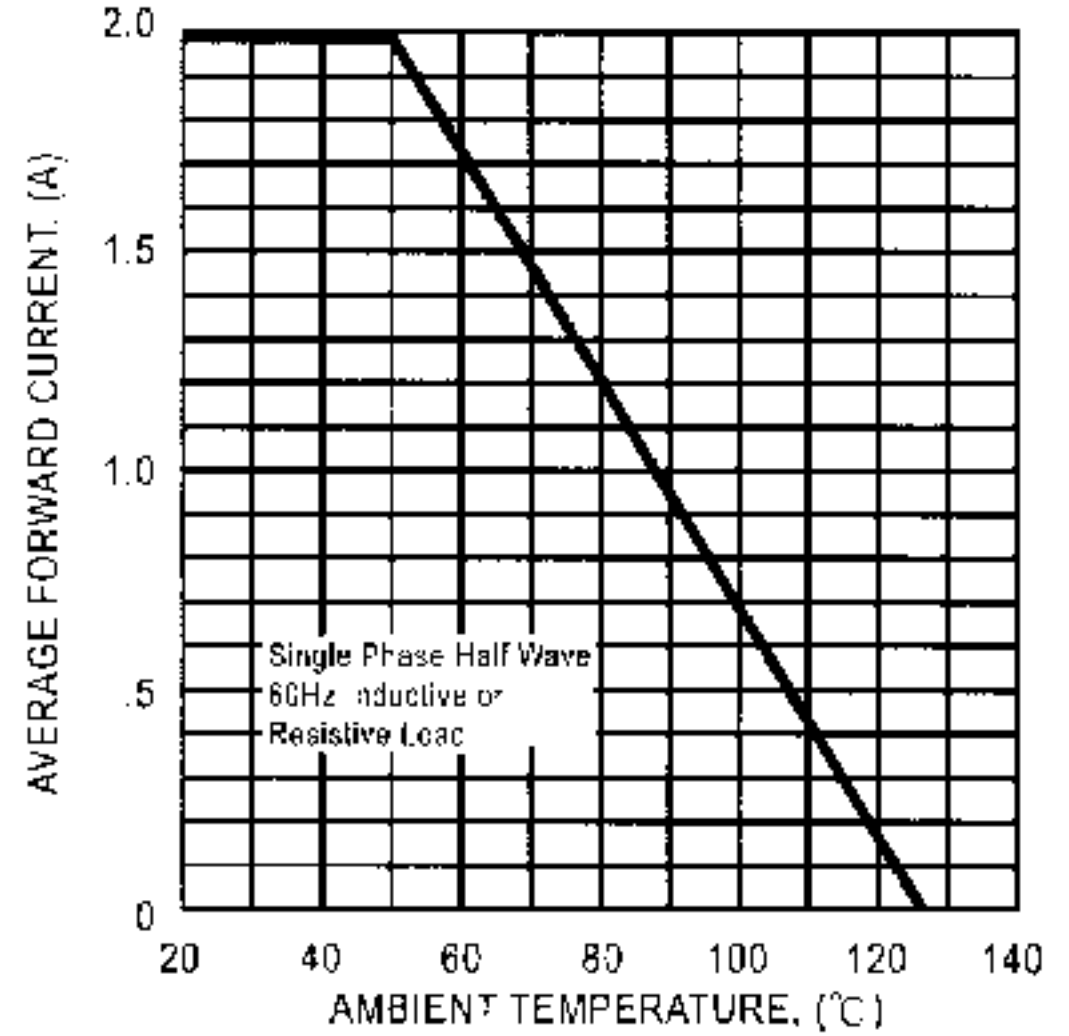


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

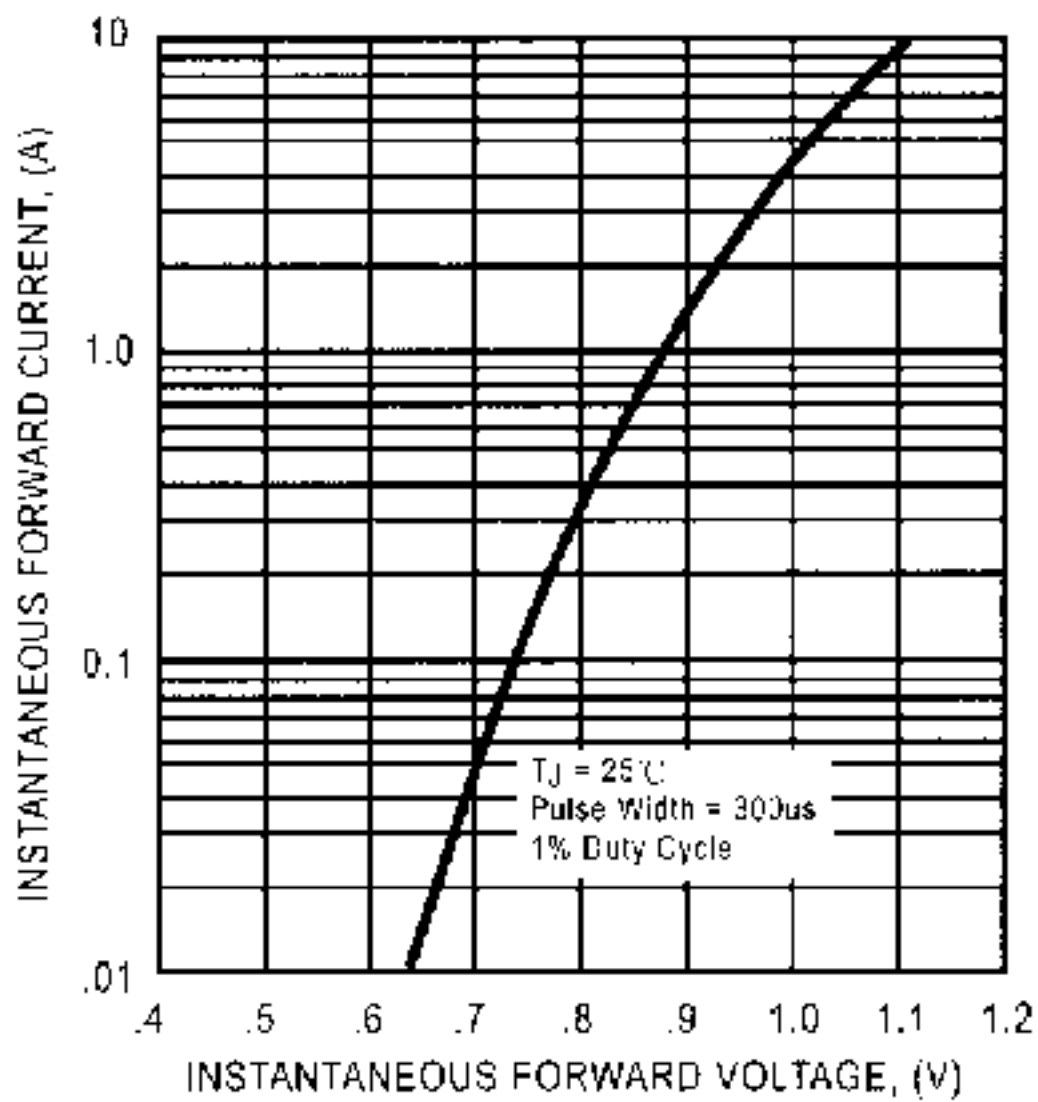


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

