



# CHENMKO ENTERPRISE CO.,LTD

## SINGLE-PHASE PASSIVATED SILICON BRIDGE RECTIFIER

VOLTAGE RANGE 50 - 1000 Volts CURRENT 10.0 Amperes

KBPC1005PT

THRU

KBPC1010PT

Lead free devices

### FEATURES

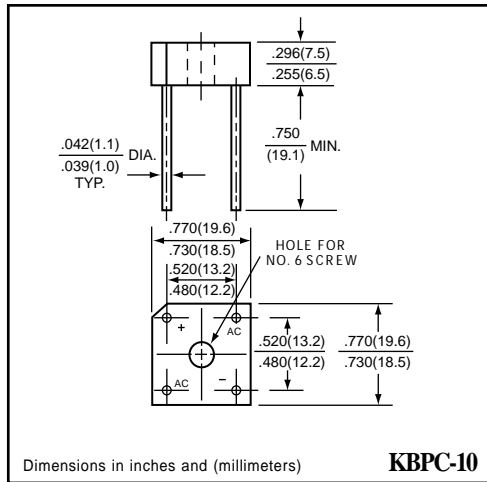
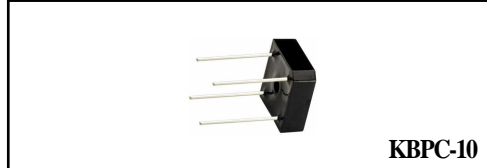
- \* Surge overload rating 200 amperes peak
- \* Low forward voltage drop
- \* Small size : simple installation
- \* Silver-plated copper leads

### MECHANICAL DATA

**Case:** JEDEC KBPC-10 molded plastic  
**Terminals:** Plated leads solderable per MIL-STD-750, Method 2026  
**Mounting position:** Any  
**Mounting:** Hole thru for # 6 screw  
**Weight:** 7.86 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%.



### MAXIMUM RATINGS ( At TA = 25°C unless otherwise noted )

RATINGS	SYMBOL	KBPC1001PT	KBPC1005PT	KBPC1002PT	KBPC1004PT	KBPC1006PT	KBPC1008PT	KBPC1010PT	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current TC = 50°C	I <sub>O</sub>	10.0							Amps
TC = 100°C		6.0							
TA = 50°C		6.0							
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	200							Amps
Operating Temperature Range	T <sub>J</sub>	-55 to +125							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

### ELECTRICAL CHARACTERISTICS ( At TA = 25°C unless otherwise noted )

CHARACTERISTICS	SYMBOL	KBPC1001PT	KBPC1005PT	KBPC1002PT	KBPC1004PT	KBPC1006PT	KBPC1008PT	KBPC1010PT	UNITS
Maximum Instantaneous Forward Voltage at 5.0 A DC	V <sub>F</sub>	1.1							Volts
Maximum Reverse Current at rated DC blocking Voltage per element	I <sub>R</sub>	10							uAmps
@ TA = 100°C		0.2							mAmps

# RATING CHARACTERISTIC CURVES ( KBPC1005PT THRU KBPC1010PT )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

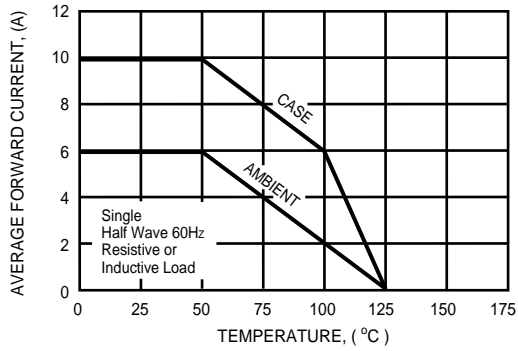


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

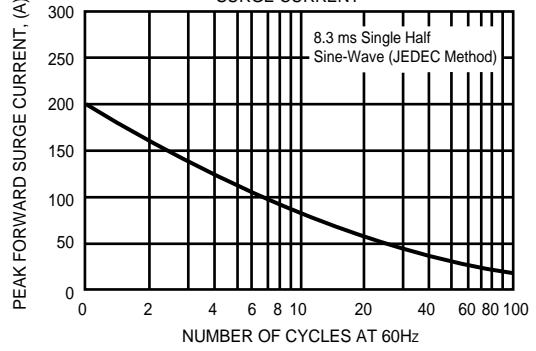


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

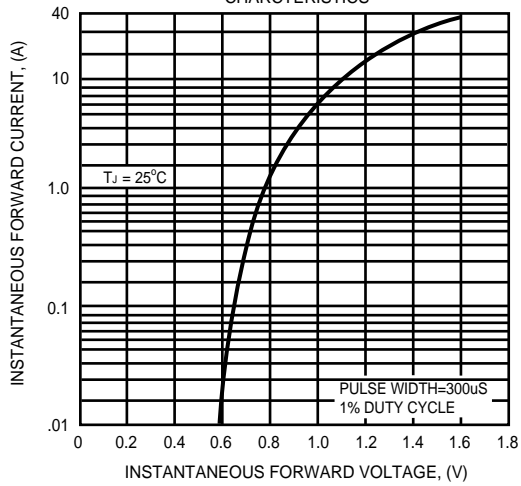


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

