

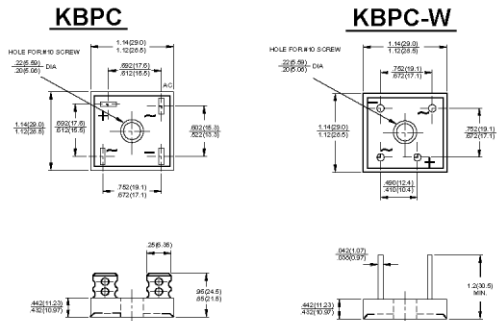


# KBPC10/15/25/35/50 Series

Glass Passivated Single-Phase Bridge Rectifiers  
Voltage Range 50 to 1000 Volts Forward Current 10/15/25/35/50 Amperes

## Features

- ◆ Surge overload rating - 200–400 Amperes peak
- ◆ Low forward voltage drop
- ◆ Mounting Position: Any
- ◆ Electrically isolated base - 1800 Volts
- ◆ Solderable 0.25" FASTON terminals
- ◆ Materials used carries U/L recognition



## Maximum Ratings and Electrical Characteristics

Rating 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%

Parameter	Symbols	KBPC	KBPC	KBPC	KBPC	KBPC	KBPC	KBPC	Units
		10005	1001	1002	1004	1006	1008	1010	
		15005	1501	1502	1504	1506	1508	1510	
		25005	2501	2502	2504	2506	2508	2510	
		35005	3501	3502	3504	3506	3508	3510	
		50005	5001	5002	5004	5006	5008	5010	
Maximum recurrent 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 $T_C=55^\circ\text{C}$	$I_{F(AV)}$	KBPC10 KBPC15 KBPC25 KBPC35 KBPC50				10.0 15.0 25.0 35.0 50.0			Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	KBPC10 KBPC15 KBPC25 KBPC35 KBPC50				200.0 300.0 300.0 400.0 400.0			Amps
Max. instantaneous forward voltage drop per element at	$V_F$	KBPC10 $I_F=5.0\text{A}$ KBPC15 $I_F=7.5\text{A}$ KBPC25 $I_F=12.5\text{A}$ KBPC35 $I_F=17.5\text{A}$ KBPC50 $I_F=25.0\text{A}$				1.2			Volts
Maximum DC reverse current at rated DC blocking voltage per element	$I_R$	$T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$				10.0 500			$\mu\text{A}$
Operating temperature range	$T_J$					-55 to +125			$^\circ\text{C}$
Storage temperature range	$T_{STG}$					-55 to +150			$^\circ\text{C}$

Notes: Also available on KBPC10W/15W/25W/35W/50W series

# RATINGS AND CHARACTERISTIC CURVES

( $T_A = 25^\circ\text{C}$  unless otherwise noted)

FIG. 1 - MAXIMUM FORWARD SURGE CURRENT

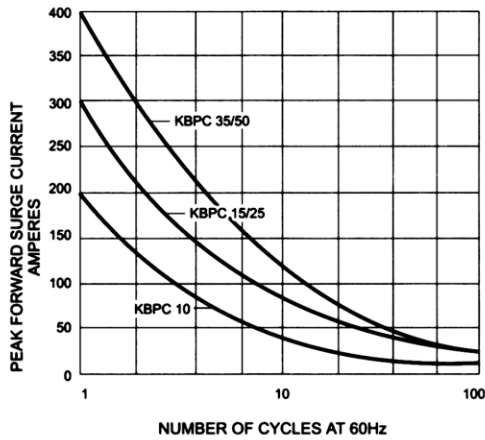


FIG. 2 - DERATING CURVE  
OUTPUT RECTIFIED CURRENT

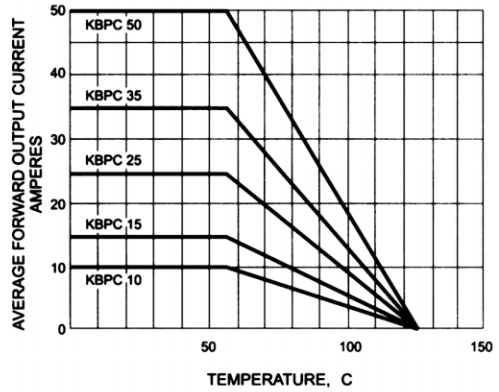


FIG. 3 - TYPICAL FORWARD CHARACTERISTICS

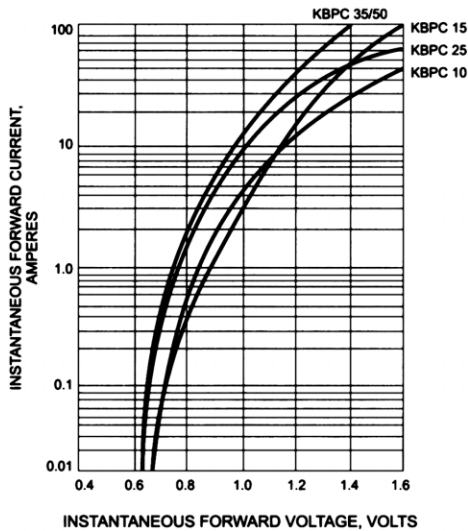


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

