

Features

- This series is UL listed under the Recognized Component Index, file number E142814
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Universal 4-way terminals, snap-on, wrap-around, solder or P.C. Board mounting
- Surge overload ratings to 400 amperes
- Electrically isolated metal case for maximum heat dissipation
- Case to terminal isolation voltage 2500V

Mechanical Data

Case: Metal case

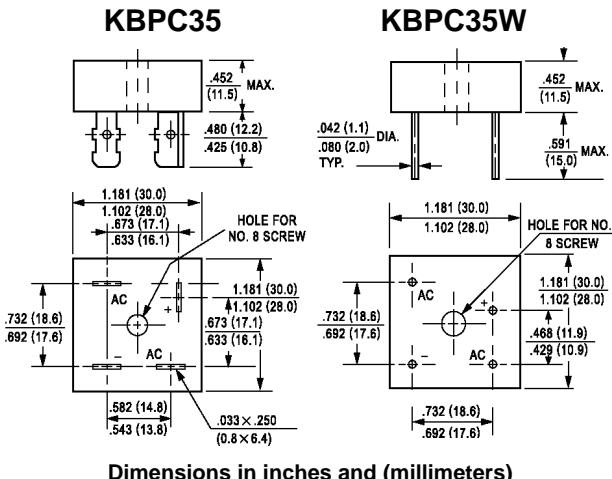
Terminals: Plated copper leads .04" (1.02 mm) diameter

Weight: 1.007 ounce, 28.5 grams (approx)

Mounting Position: Bolt down with silicone thermal compound between bridge and mounting surface for maximum heat transfer efficiency

Mounting Torque: 20 in-lb max.

KBPC35005 -KBPC3510



Dimensions in inches and (millimeters)

Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.
For Capacitive load derate current by 20%.

Parameter	Symbol	KBPC 35005	KBPC 3501	KBPC 3502	KBPC 3504	KBPC 3506	KBPC 3508	KBPC 3510	unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current at TA=55°C	IF(AV)				35				A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM				400				A
Rating for fusing (t<8.3ms)	I ² t				664				A ² sec
Typical thermal resistance per element(1)	ReJA				2.5				°C / W
Operating junction and storage temperature range	TJ, TSTG				-55 to + 150				°C

Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.
For Capacitive load derate by 20 %.

Parameter	Symbol	KBPC 35005W	KBPC 3501W	KBPC 3502W	KBPC 3504W	KBPC 3506W	KBPC 3508W	KBPC 3510W	Unit
Maximum instantaneous forward voltage drop per leg at 17.5A	VF				1.0				V
Maximum DC reverse current at rated TA =25°C DC blocking voltage per element TA =125°C	IR				10 500				μA

Notes: (1)Thermal resistance from Junction to Ambemton P.C.board mounting.

KBPC35005W -KBPC3510W CHARACTERISTIC CURVES

Fig. 1 Derating Curve for Output Rectified Current

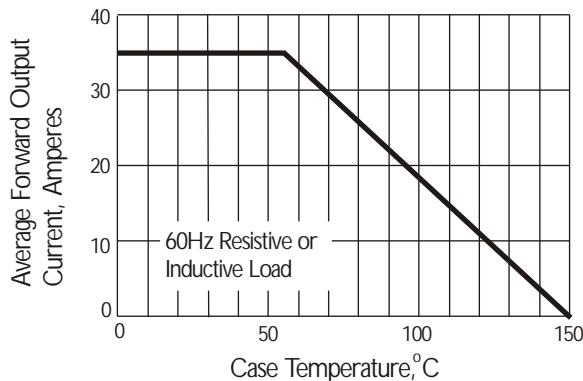


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

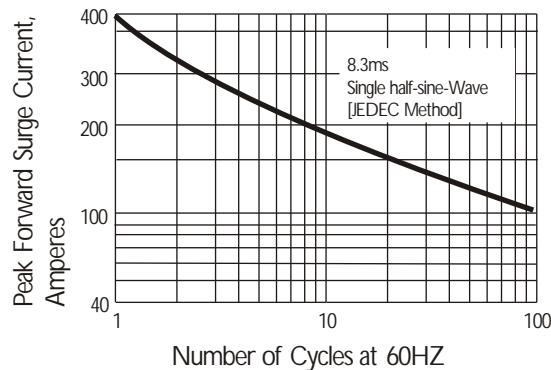


Fig. 3 Typical Instantaneous Forward Characteristics

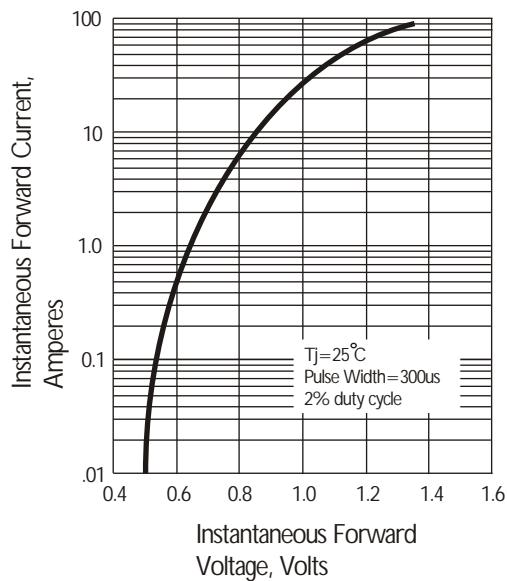


Fig. 4 Typical Reverse Characteristics at $T_j=25^{\circ}\text{C}$

