

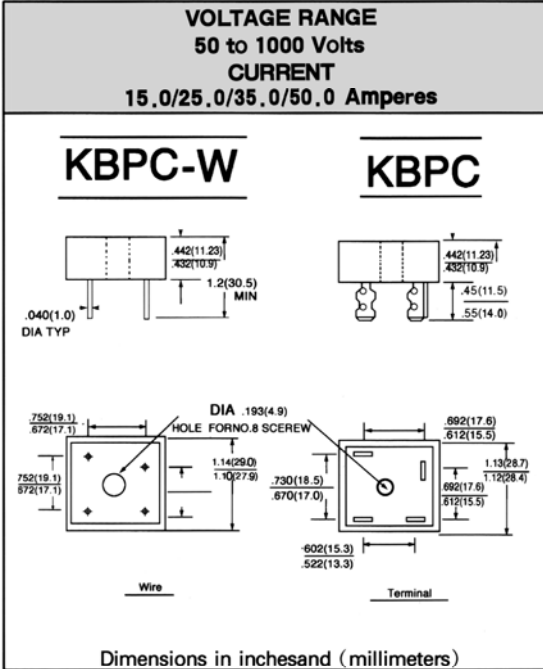
KBPC15, 25, 35, 50 SERIES

HIGH CURRENT 15, 25, 35, 50 AMPS. SINGLE PHASE BRIDGE RECTIFIERS



FEATURES

- * Metal case with an electrically isolated mylar
- * Rating to 1,000V PRV
- * High efficiency
- * Mounting: thru hole for # 10 screw
- * High temperature soldering guaranteed: 260°C/10 seconds at 5 lbs., (2.3 kg) tension
- * Terminals solderables per MIL – STD – 202. method 208
- * Isolated voltage from case to lead over 2000 volts



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	SYMBOLS	- 00	- 01	- 02	- 04	- 06	- 08	- 10	UNITS	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V.	
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V	
Maximum D. C Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Output Current @ $T_C = 55^\circ\text{C}$ (See Fig. 1)	$I_{F(AV)}$	KBPC15 KBPC25 KBPC35 KBPC50				15.0 25.0 35.0 50.0				A
Peak Forward Surge Current single sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	KBPC15 KBPC25 KBPC35 - KBPC50				200 300 400				A
Maximum Instantaneous Forward Voltage Drop per Element at Specified Current	V_F	KBPC15 7.5A KBPC25 12.5A KBPC35 17.5A KBPC50 25.0A				1.10				V
Maximum Reverse DC Current at Rated D. C Blocking Voltage per Element	I_R					10.0				μA
Typical Thermal Resistance <1>	$R_{\theta JC}$					2.0				$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J/T_{STG}					- 50 to + 125	/	- 50 to + 150	$^\circ\text{C}$	

Notes: 1. Thermal Resistance from Junction to Case Per leg.
2. Bolt down on heatsink with silicone thermal compound between bridge and mounting surface for maximum heat transfer with # 10 screw
3. Suffix "W" - Wire Lead Structure.

HV COMPONENT ASSOCIATES

P.O. Box 848 Farmingdale, NJ 07727
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RATINGS AND CHARACTERISTIC CURVES (KBPC1500 THRU KBPC5010)

FIG. 1 – TYPICAL FORWARD CURRENT DERATING CURVE

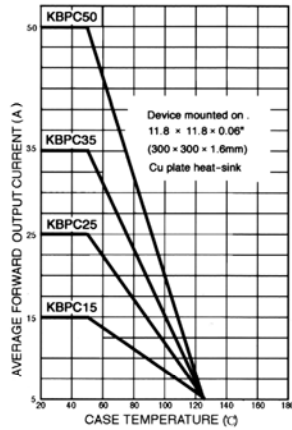


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT – PER ELEMENT

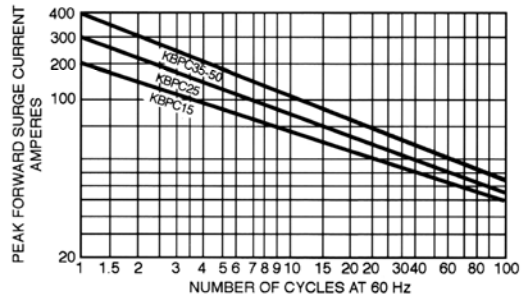


FIG. 4 – TYPICAL FORWARD CHARACTERISTICS – PER ELEMENT

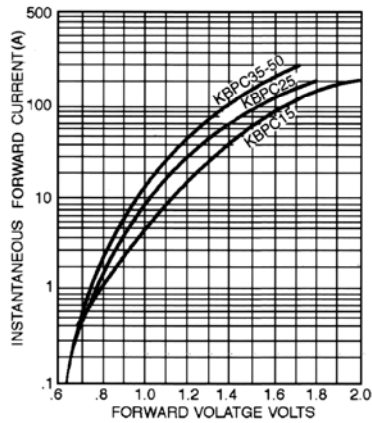
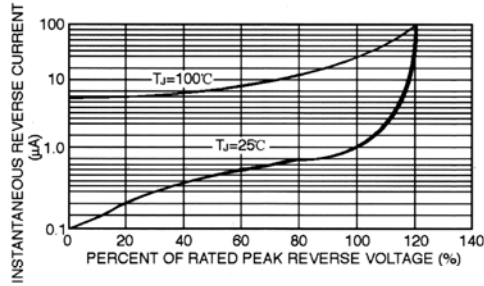


FIG. 3 – TYPICAL REVERSE CHARACTERISTICS PER ELEMENT



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