



# KBPC15, 25, 35 SERIES

## HIGH CURRENT 15, 25, 35 AMPS SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS



### FEATURES

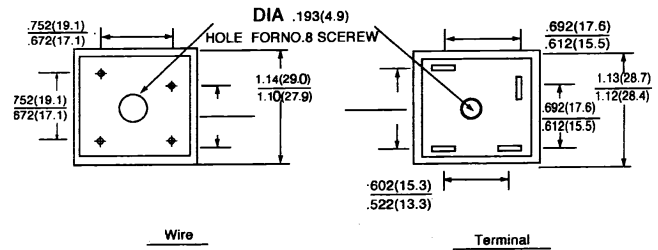
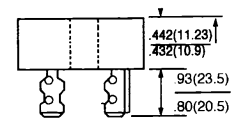
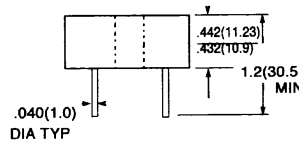
- \* Metal case with an electrically isolated mylar
- \* Rating to 1,000V PRV
- \* High efficiency
- \* Mounting: thru hole for # 10 screw
- \* High temperature soldering guaranteed: 260°C/10 seconds at 5 lbs. , (2.3 kg) tension
- \* Terminals solderables per MIL – STD – 202. method 208
- \* Isolated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

### VOLTAGE RANGE

50 to 1000 Volts  
CURRENT  
15.0/25.0/35.0 Amperes

### KBPC-W

### KBPC



Dimensions in inches and (millimeters)

### 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	-00G	-01G	-02G	-04G	-06G	-08G	-10G	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			15.0			A	
		KBPC25			25.0				
		KBPC35			35.0				
Peak Forward Surge Current single sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	KBPC15			200			A	
		KBPC25			300				
		KBPC35			400				
Maximum Instantaneous Forward Voltage Drop per Element at Specified Current	$V_F$	KBPC15 7.5A	KBPC25 12.5A	KBPC35 17.5A	1.10			V	
Maximum Reverse DC Current at Rated D. C Blocking Voltage per Element	$I_R$				10.0			$\mu\text{A}$	
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 + 150			$^\circ\text{C}$	

Notes: 1. Thermal Resistance from Junction to Case Per leg.

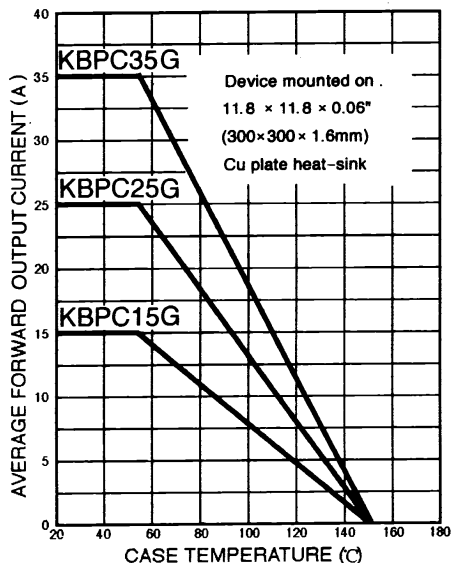
2. Bolt down on heatsink with silicone thermal compound between bridge and mounting surface for maximum heat transfer with # 10 screw

3. Suffix "W" – Wire Lead Structure.

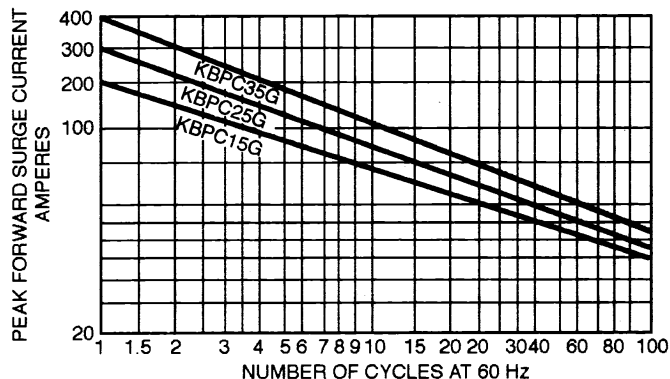
**RATINGS AND CHARACTERISTIC CURVES**

**KBPC1500G      KBPC1510G**  
**(KMPC2500G THRU KBPC2510G)**  
**KBPC3500G      KBPC3510G**

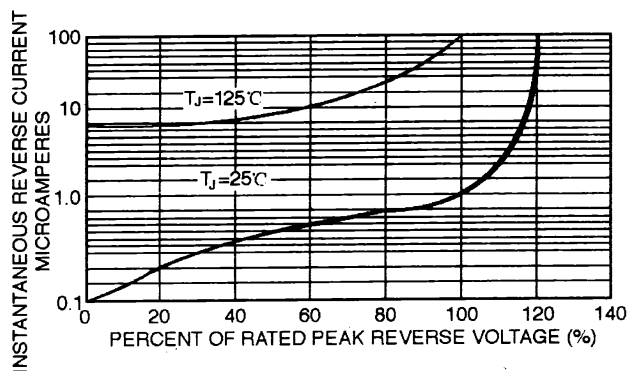
**FIG.1 – TYPICAL FORWARD OUTPUT CURRENT DERATING CURVE**



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



**FIG.3 – TYPICAL REVERSE CHARACTERISTICS PER ELEMENT**



**FIG.4 – TYPICAL FORWARD CHARACTERISTICS – PER ELEMENT**

