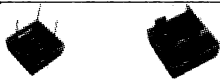




## KBPC15, 25, 35, 50 SERIES

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



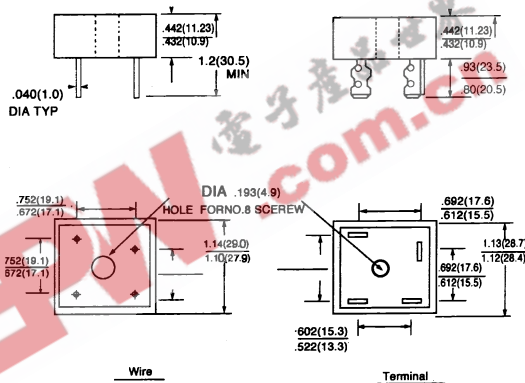
### FEATURES

- \* 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

**VOLTAGE RANGE**  
50 to 1000 Volts  
**CURRENT**  
15.0/25.0/35.0/50.0 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	-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)	$I_{F(AV)}$				15.0	25.0	35.0	50.0	A
Peak Forward Surge Current single sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$				200	300	400		A
Maximum Instantaneous Forward Voltage Drop per Element at Specified Current	$V_F$				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 +125	/		-50 to +150	$^\circ\text{C}$

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

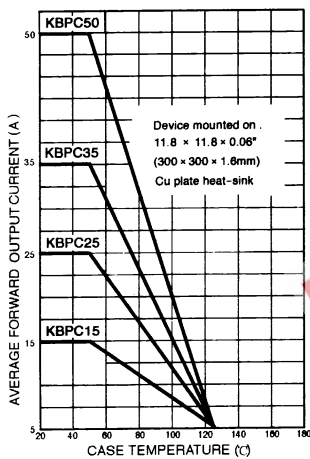
2. Bolt down on heatsink with silicone thermal compound between bridge and mounting surface for maximum heat transfer with # 10 screw

3. Suffix "W" - Wire Lead Structure.

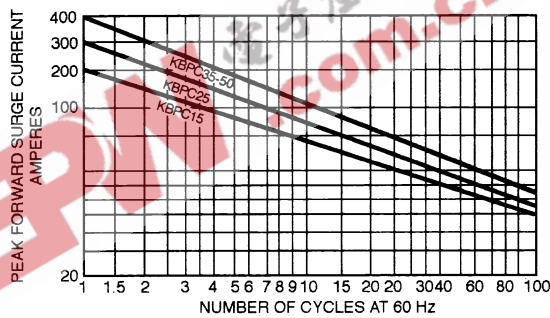


1500
1510  
**RATINGS AND CHARACTERISTIC CURVES (KBPC2500 THRU KBPC2510)**  
3500
3510  
5000
5010

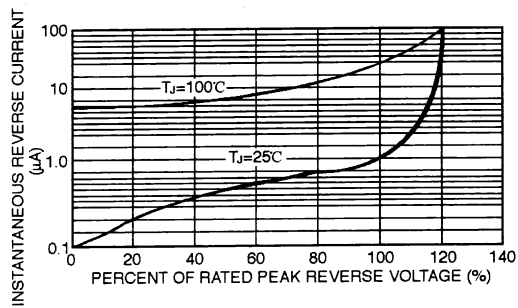
**FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE**



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



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



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

