

## KBPC25005 THRU KBPC2510

### High Current 25 AMPS. Single Phase Glass Passivated Bridge Rectifiers

Voltage Range 50 to 1000 Volts Current 25 Amperes

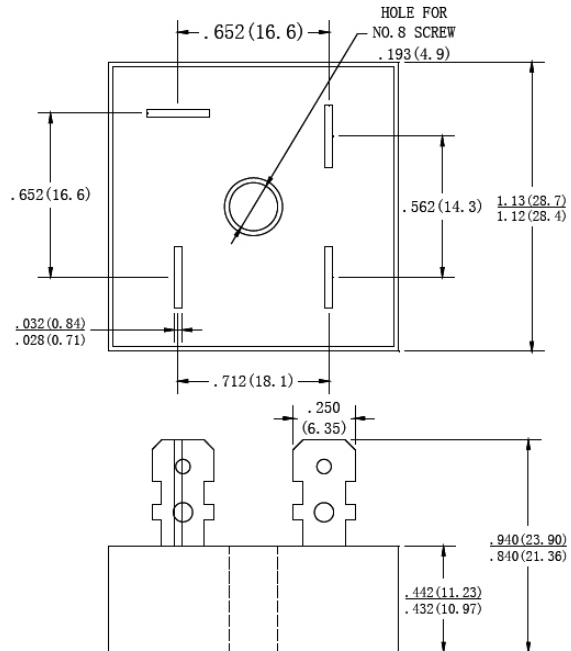
## KBPC25

#### FEATURES

- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction technique results in inexpensive product
- ◆ High temperature soldering guaranteed:  
260°C / 10 seconds / 0.375" ( 9.5mm )  
lead length at 5 lbs., ( 2.3 kg ) tension
- ◆ UL Recognized File number: E347214

#### MECHANICAL DATA

- ◆ Case: Molded plastic
- ◆ Lead: solder plated
- ◆ Polarity: As marked



Dimensions in inches and (millimeters)

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

	SYMBOLS	KBPC 25005	KBPC 2501	KBPC 2502	KBPC 2504	KBPC 2506	KBPC 2508	KBPC 2510	UNITS
Maximum Repetitive 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 DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at $T_c=55^\circ\text{C}$	$I_{(AV)}$	25							A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	$I_{FSM}$	300							A
Maximum Instantaneous Forward Voltage at 12.5A	$V_F$	1.1							V
Maximum DC Reverse Current at Rated DC Blocking voltage per Element	$I_R$	10							$\mu\text{A}$
Typical Thermal Resistance (Note)	$R_{\theta JC}$	2.0							$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_J$	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

**Note:** Thermal Resistance from Junction to Case.

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### RATING AND CHARACTERISTIC CURVES KBPC25005 THRU KBPC2510

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

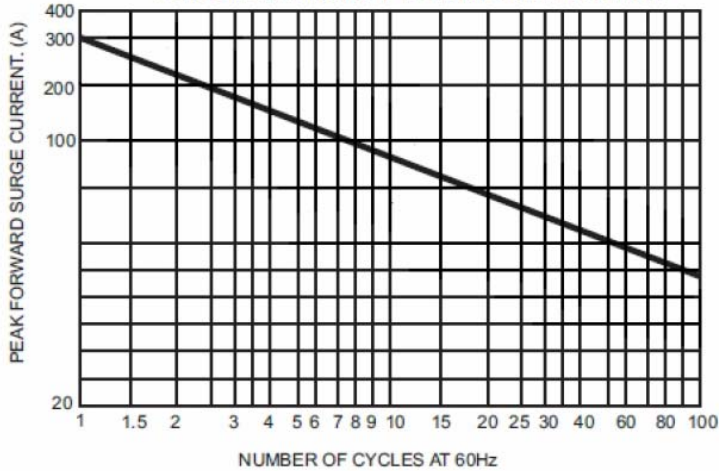


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

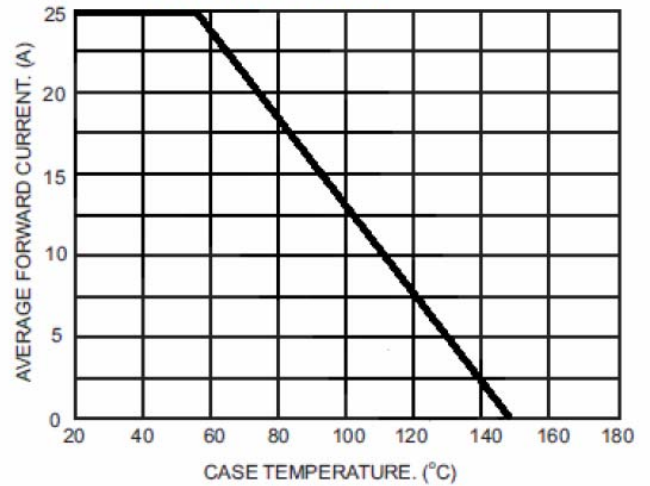


FIG.3- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

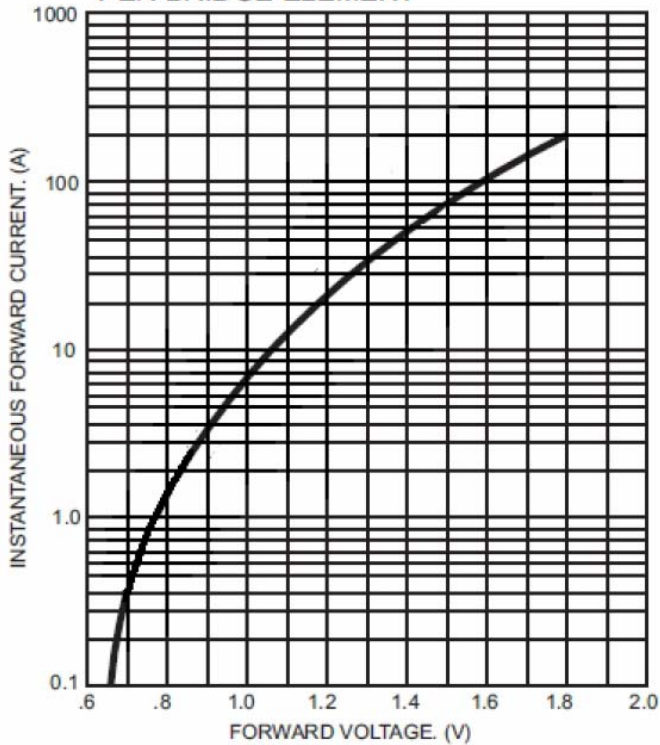
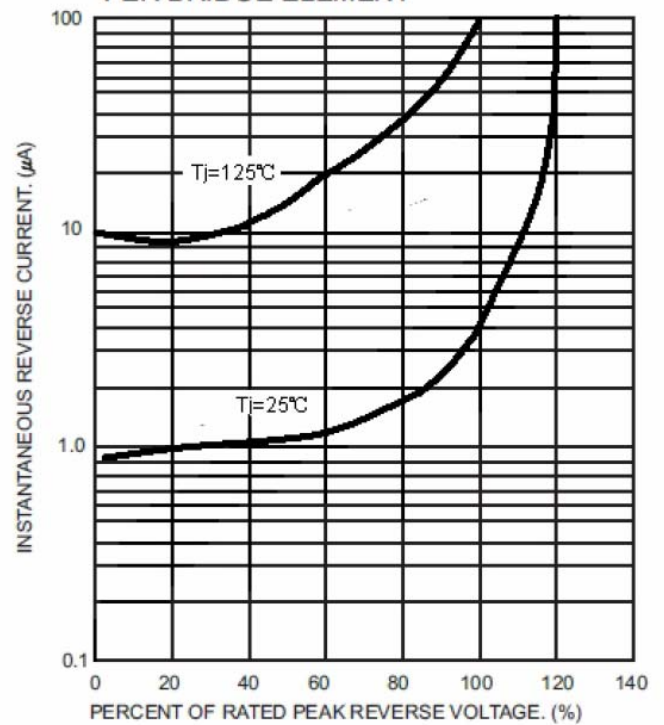


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT



Note: Specifications are subject to change without notice.