

**25A HIGH CURRENT SINGLE-PHASE SILICON BRIDGE RECTIFIER**

**Voltage - 600 to 1600 V**

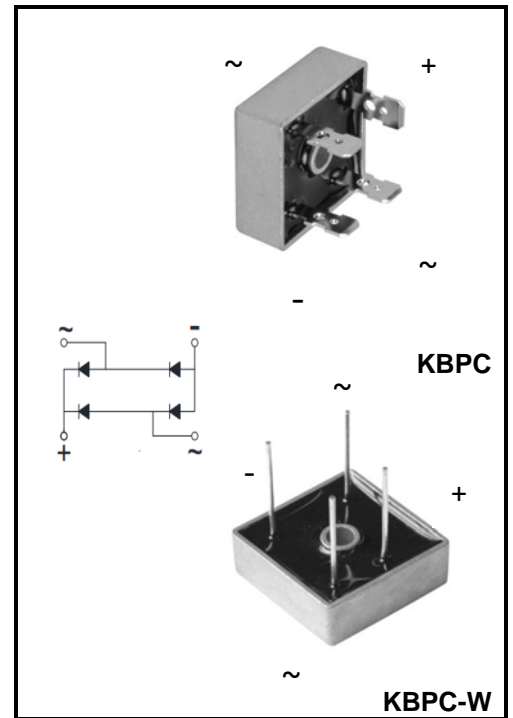
**Forward Current – 25 A**

**FEATURES**

- ◆High current capability
- ◆Low forward voltage drop
- ◆Glass Passivated Chip Junction
- ◆Low power loss, high efficiency
- ◆Lead free in comply with EU RoHS 2011/65/EU directives

**MECHANICAL DATA**

- ◆Case: KBPC, KBPC-W
- ◆Terminals: Solderable per MIL-STD-202, Method 208
- ◆Approx. Weight: KBPC 31.6g , KBPC-W 28.5g



**Maximum Ratings and Electrical characteristics**

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	KBPC2506 (W)	KBPC2508 (W)	KBPC2510 (W)	KBPC2512 (W)	KBPC2516 (W)	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	600	800	1000	1200	1600	V
Maximum RMS voltage	$V_{RMS}$	420	560	700	840	980	V
Maximum DC Blocking Voltage	$V_{DC}$	600	800	1000	1200	1600	V
Maximum Average Forward Rectified Current at TC=60°C	$I_{(AV)}$	25					A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	400					A
Maximum Forward Voltage at 12.5A DC and 25°C	$V_F$	1.1					V
Maximum Reverse Current at TA=25°C at Rated DC Blocking Voltage TA=125°C	$I_R$	10 1.0					$\mu A$ mA
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150					°C

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) Thermal Resistance Junction to Case, Lead and Ambient.

**Ratings And Characteristic Curves**

FIG.1-MAXIMUM FORWARD SURGE CURRENT

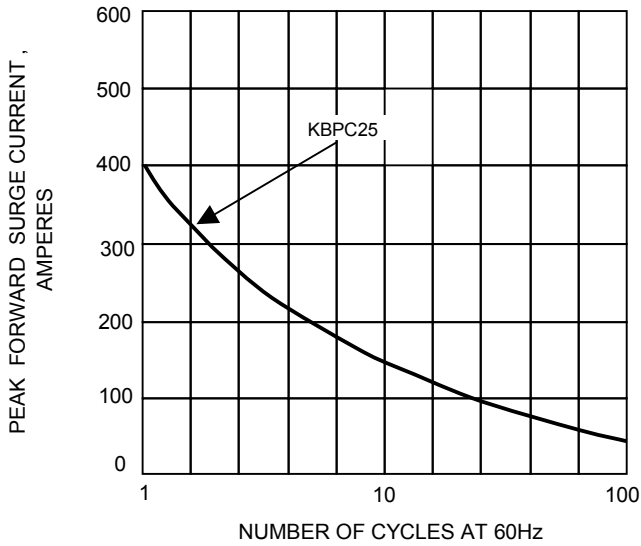


FIG.2- DERATING CURVE  
OUTPUT RECTIFIED CURRENT

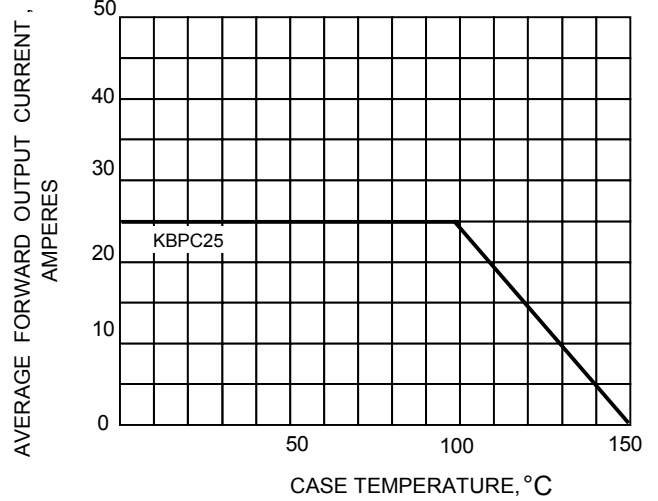


FIG.3-TYPICAL FORWARD CHARACTERISTICS

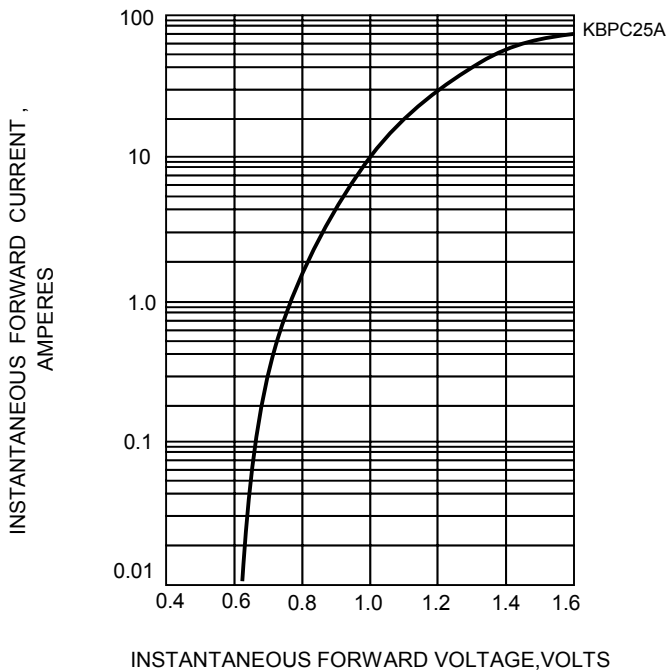
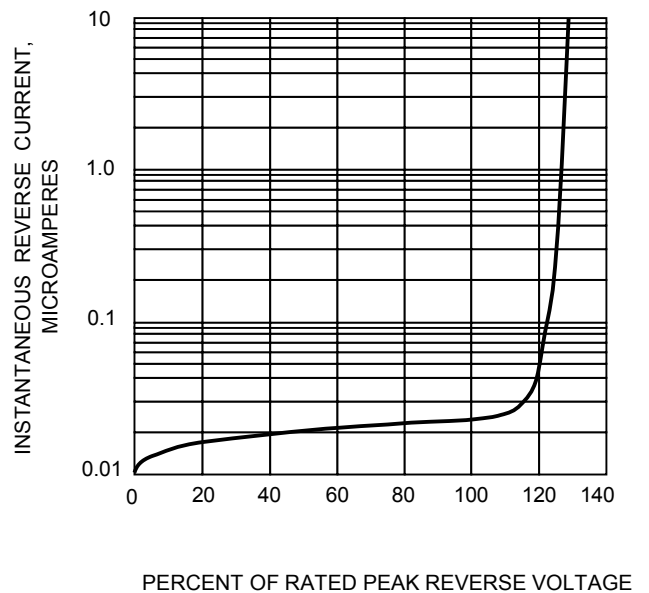
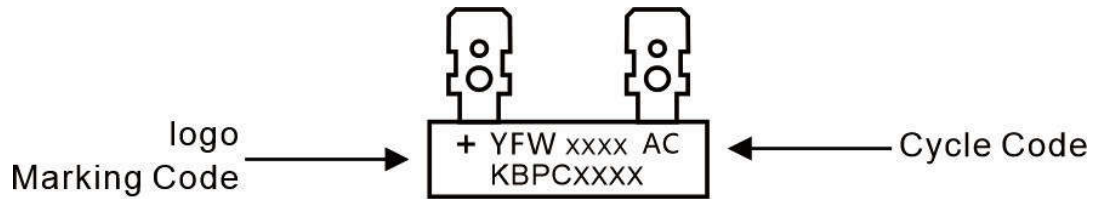


FIG.4-TYPICAL REVERSE CHARACTERISTICS



**Marking Diagram**



**Ordering information**

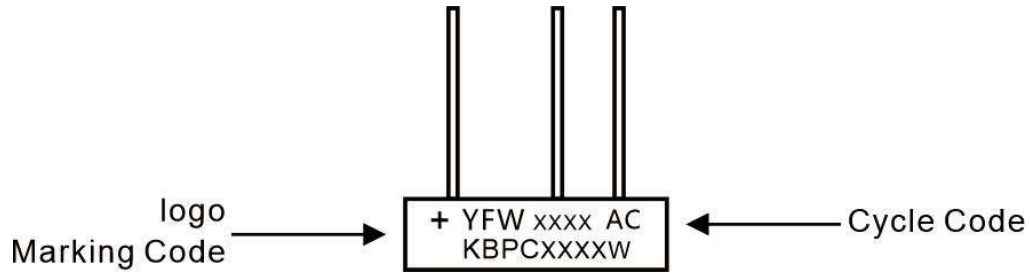
Package	Packing Description	Packing Quantity
KBPC	bulk	50PCS/Box 500PCS/Carton

**Package Dimensions**

**KBPC**

Dim.	Millimeter(mm)		Dimensions inInch	
	Min.	Max.	Min.	Max.
A	28.2	28.8	1.11	1.13
B	15.3	17.3	0.602	0.681
C	17.1	19.1	0.673	0.752
D	13.2	15.2	0.520	0.598
E	0.75	0.85	0.0295	0.0335
F	6.2	6.4	0.244	0.252
G	2.3	2.5	0.091	0.098
H	10.8	11.2	0.425	0.441
I	19	-	0.748	-

**Marking Diagram**



**Ordering information**

Package	Packing Description	Packing Quantity
KBPC-W	bulk	50PCS/Box 500PCS/Carton

**Package Dimensions**

**KBPC-W**

Dim.	Millimeter(mm)		Dimensions inInch	
	Min.	Max.	Min.	Max.
A	28.2	28.8	1.11	1.13
B	17.1	19.1	0.673	0.752
C	10.4	12.4	0.409	
D	0.95	1.05	0.037	0.041
E	10.8	11.2	0.425	0.441
F	30	-	1.18	-

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