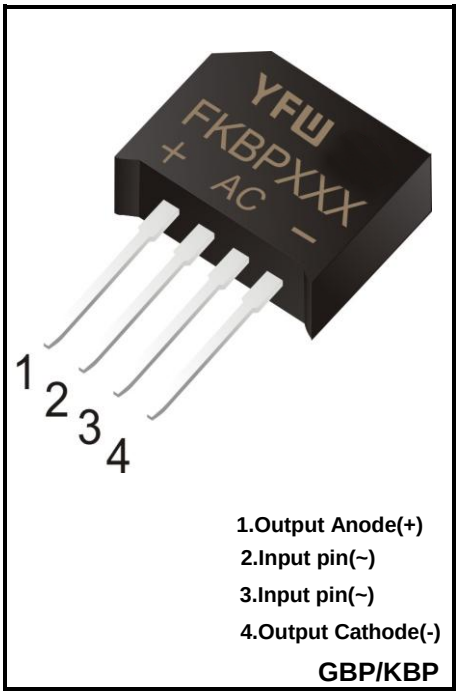
6A Glass Passivated Single-Phase Bridge Rectifier
Reverse Voltage –1000 V
Forward Current – 6.0A



1.Output Anode(+)
2.Input pin(~)
3.Input pin(~)
4.Output Cathode(-)
GBP/KBP

FEATURES

- Glass passivated chip
- High surge current capability
- Uitrasoft recovery
- Case to Terminal Isolation Voltage 2500V

MECHANICAL DATA

- Case: GBP/KBP
- Marking / Polarity: Marked on Body
- Weight: About 1.2grams

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	FKBP610	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS voltage	V_{RMS}	700	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Average Forward Output Rectified Current@Ta =120℃	$I_{F(AV)}$	6.0	A
Maximum reverse recovery time (NOTE 1)	Trr	500	NS
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load(JEDEC method)	I_{FSM}	150	A
I^2t Rating for Fusing(1ms≤t≤10ms)	I^2t	93	A^2S
Maximum Forward Voltage at 6.0 A	V_F	1.3	V
Maximum DC Reverse Current @T_A=25℃ at Rated DC Blocking Voltage @T_A=125℃	I_R	5 500	uA
Rms isolation voltage from case to leads	V_{isol}	2500	V
Typical Junction Capacitance (Note1)	C_j	42	pF
Maximum thermal resistance per leg	$R_{\theta JC}$	4.2	°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	°C

Note: (1) Junction to case with heatsink
(2) Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with M3 screw .

Characteristics(Typical)

Fig 1-forwardCurrent derating Curve

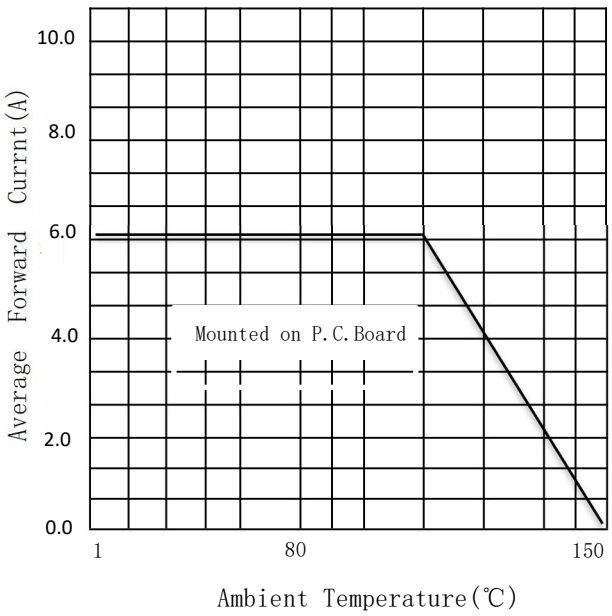


Fig.2-Maximum Non-Repetitive Surge Currnet

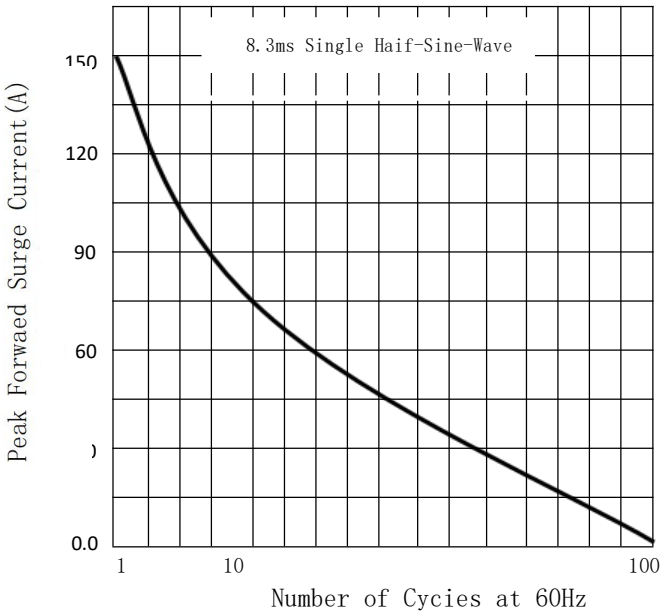


Fig.3-Typical Reverse Characteristics

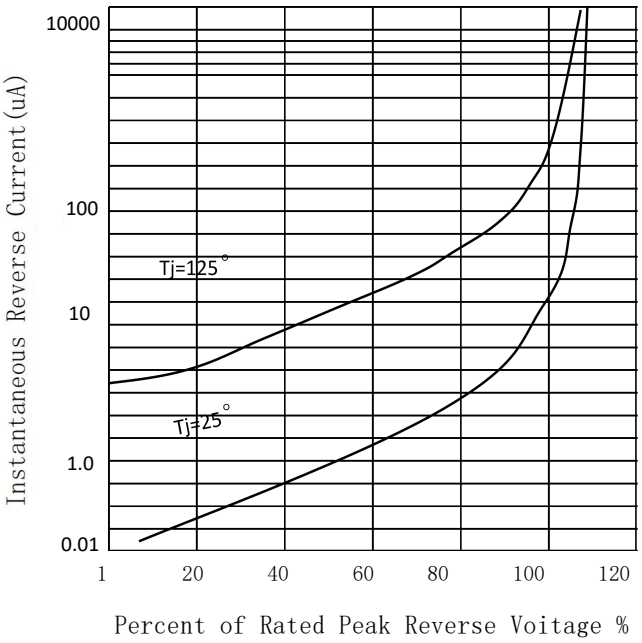
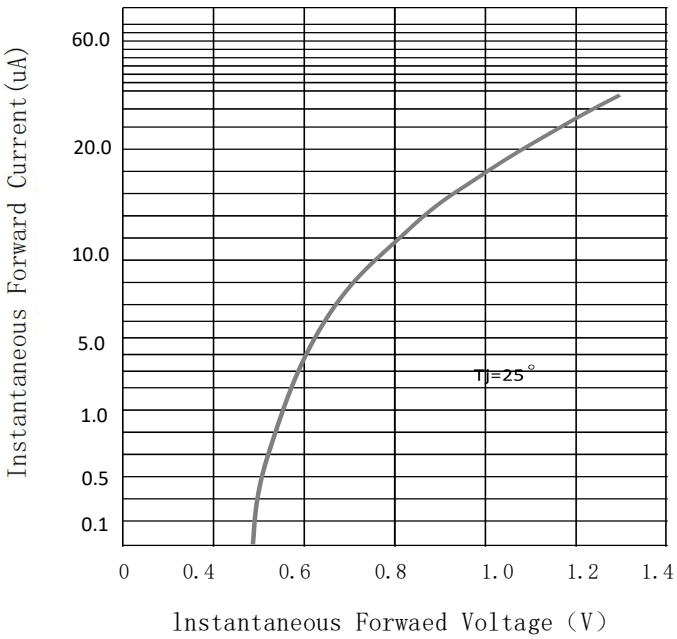
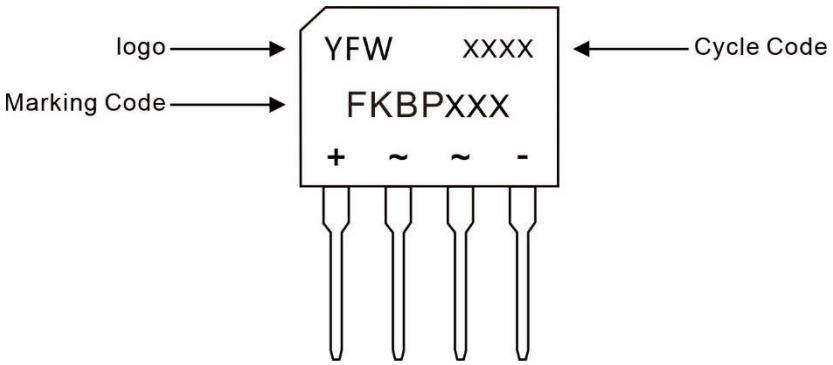


Fig.4-Typical Forwaed Characteristics



Marking Diagram

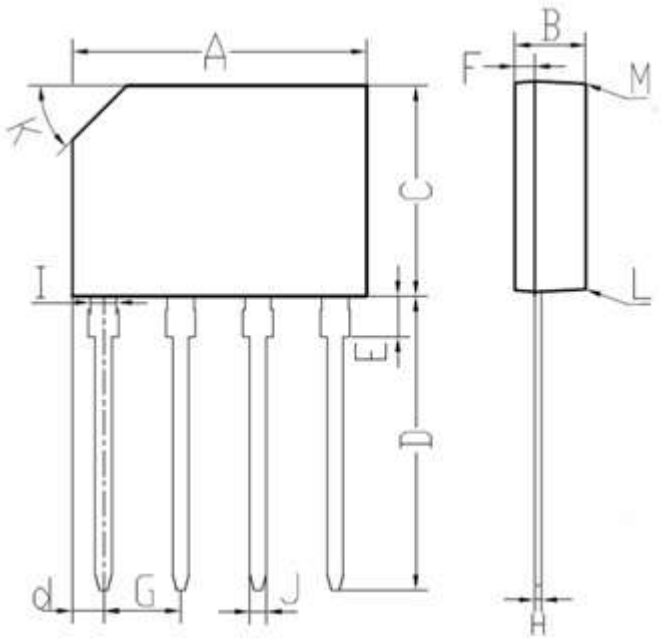


Ordering information

Package	Packing Description	Packing Quantity
KBP	bulk	500PCS/Box 5000PCS/Carton

Package Dimensions

KBP



Dim.	Millimeter(mm)		Dimensions inInch	
	Min.	Max.	Min.	Max.
A	14.3	14.60	0.56	0.57
B	3.0	3.3	0.12	0.13
c	10.45	10.75	0.41	0.42
D	14.41	14.71	0.57	0.58
d	1.40	1.70	0.06	0.07
E	2.0	2.30	0.09	0.09
F	0.90	1.20	0.04	0.05
G	3.50	3.80	0.14	0.15
H	0.35	0.37	0.01	0.01
I	1.43	1.45	0.06	0.06
J	0.8	0.83	0.03	0.03
K	2.7×45°（Typ）		0.11×45°（Typ）	
L	#	3°	#	3°
M	#	2°	#	2°

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