

6.0A GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage - 100 to 1000 V

Forward Current – 6.0A

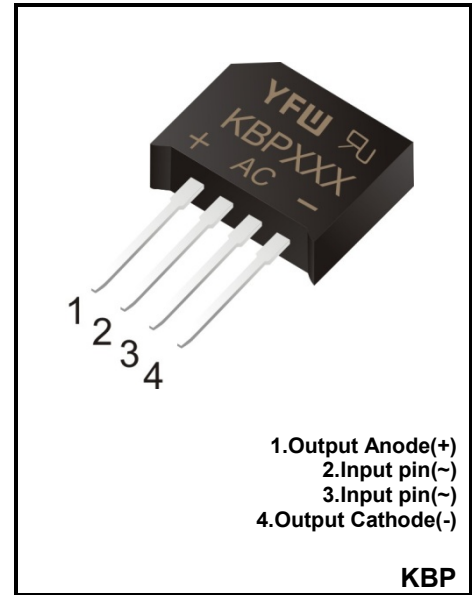


FEATURES

- ◆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: KBP
- ◆Terminals: Solderable per MIL-STD-202, Method 208
- ◆Approx. Weight: 1.52g / 0.05oz



Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	KBP601	KBP602	KBP604	KBP606	KBP608	KBP610	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V
Average Rectified Output Current	$I_{(AV)}$	6						A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	165						A
Forward Voltage per element @ $I_F = 3.0A$ DC	V_F	1.0						V
Maximum DC Reverse Current @ $T_j = 25^\circ C$ at Rated DC Blocking Voltage @ $T_j = 25^\circ C$	I_R	10						μA
		500						
I ² t Rating for Fusing(3ms≤t≤8.3ms)	i^2t	93						A ² S
Maximum Typical Thermal Resistanc	wwithout heatsink	$R_{\theta JA}$						°C/W
	wwith heatsink	55						
	wwithout heatsink	$R_{\theta JC}$						
		1.5						
		15						
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) Device mounted on 50mm*50mm*1.6mm Cu plate heatsink

FIG.1-DERATING CURVE OUTPUT RECTIFIED CURRENT

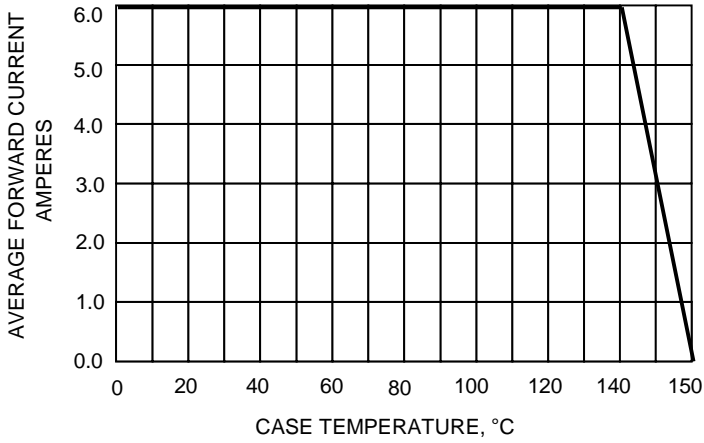


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

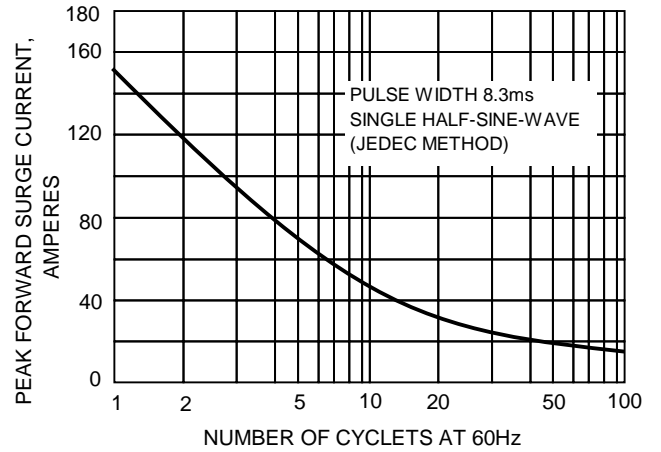


FIG.3-TYPICAL FORWARD CHARACTERISTICS

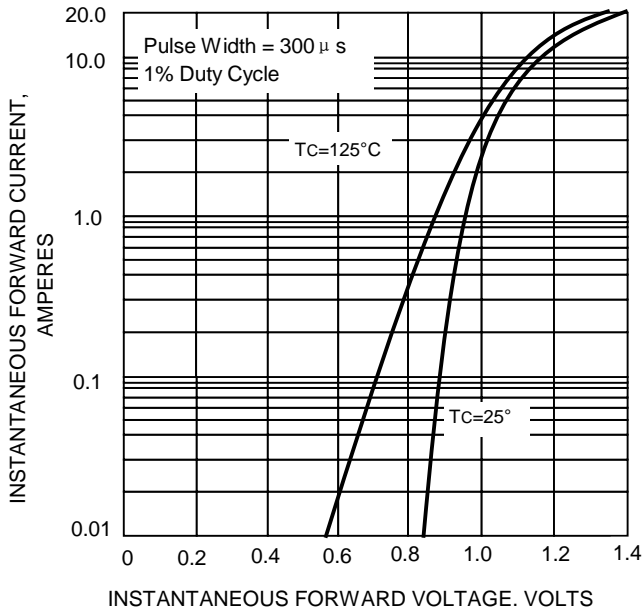
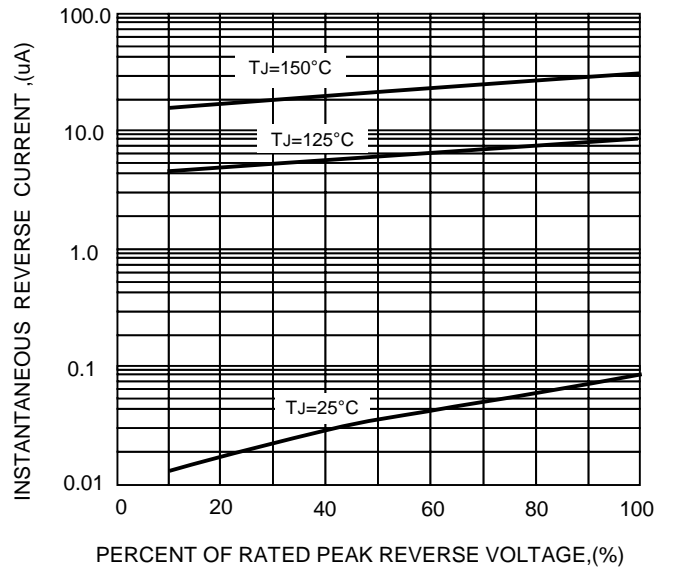
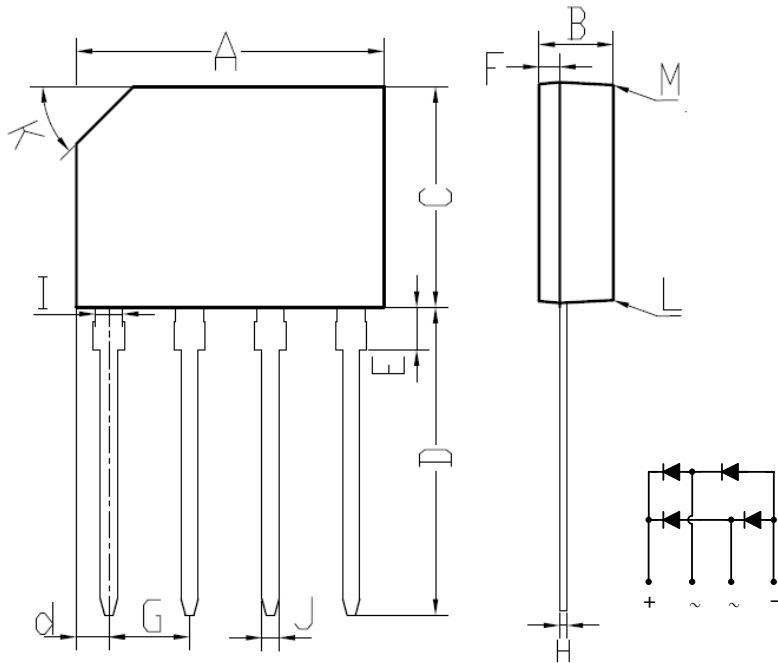


FIG.5-TYPICAL REVERSE CHARACTERISTICS



Package Outline

KBP



KBP		
DIM.	MIN.	MAX.
A	14.15	14.65
B	2.95	3.55
C	10.45	10.60
D	14.60	14.73
d	1.40	1.70
E	1.80	2.20
F	0.80	1.10
G	3.56	4.06
H	0.35	0.55
I	1.22	1.42
J	0.76	0.86
K	2.7 x 45° (Typ)	
L	#	3°
M	#	2°
All Dimensions in millimeter		

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
KBP	BOX	500	EIA-481-1