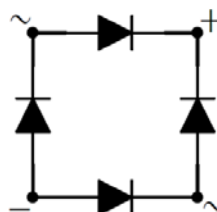




KBPC50005 thru KBPC5010



Glass Passivated Bridge Rectifiers



Features
<ul style="list-style-type: none"> • Glass passivated die construction • Low forward voltage drop • High current capability • High surge current capability • Plastic material-UL flammability 94V-0

Mechanical Data
• Case:Molded plastic,KBPC
• Terminals:Plated Leads Solderable per MIL-STD-202, Method 208
• Polarity:As Marked on Case
• Mounting Position:Any
• Marking:Type Number
• Lead Free:For RoHS/Lead Free Version

Ordering Information			
Part No.	Remark	Package	Packing
KBPC5xxx	General	KBPC	50 / Box
KBPC5xxx-H	Halogen Free		

Primary Characteristics		
I_F	50	A
V_{RRM}	50~1000	V
I_{FSM}	500	A
V_F	1.1	V
$T_J \text{ max}$	150	°C

Maximum Ratings (TA=25°C unless otherwise noted)									
PARAMETER	SYMBOL	KBPC 50005	KBPC 5001	KBPC 5002	KBPC 5004	KBPC 5006	KBPC 5008	KBPC 5010	UNIT
Peak Repetitive Reverse Voltage	V_{RRM}								
Working Peak Reverse Voltage	V_{RWM}	50	100	200	400	600	800	1000	V
DC Blocking Voltage	V_{DC}								
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)@TC=90°C	$I_{F(AV)}$	50.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	500							A
I2t Rating for Fusing (t < 8.3ms)	I^2t	1037.50							A ² s
Forward Voltage per element @IF=25.0A	V_{FM}	1.1							V
Peak Reverse Current @TA=25°C At Rated DC Blocking Voltage @TA=125°C	I_R	10.0 500							µA
Typical Junction Capacitance per leg(Note 2)	C_j	300							pF
Typical Thermal Capacitance per leg	$R_{\theta JC}$	0.7							°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							°C

NOTES:1.Mounted 35mm x35mm x17mm Al Plate Heatsink.
2.Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



Glass Passivated Bridge Rectifiers

Rating and Characteristics Curves

Fig. 1 Output Current Derating Curve

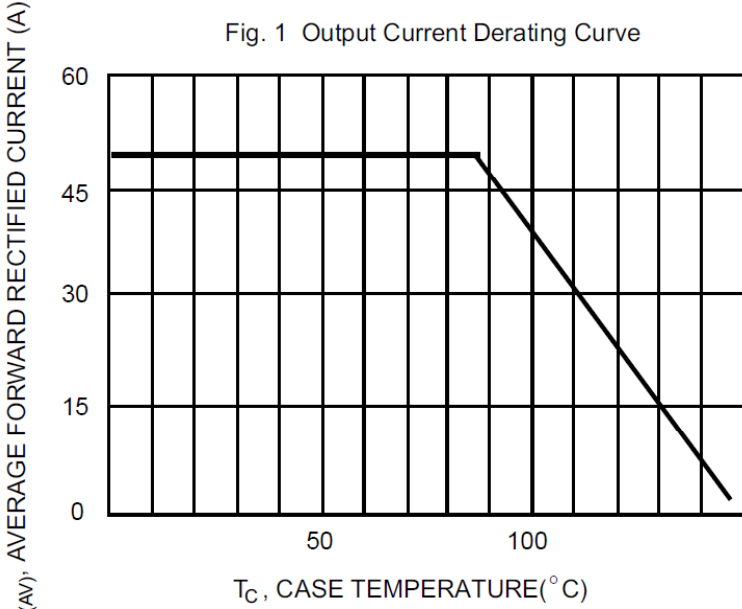


Fig. 2 Typical Forward Characteristics (per leg)

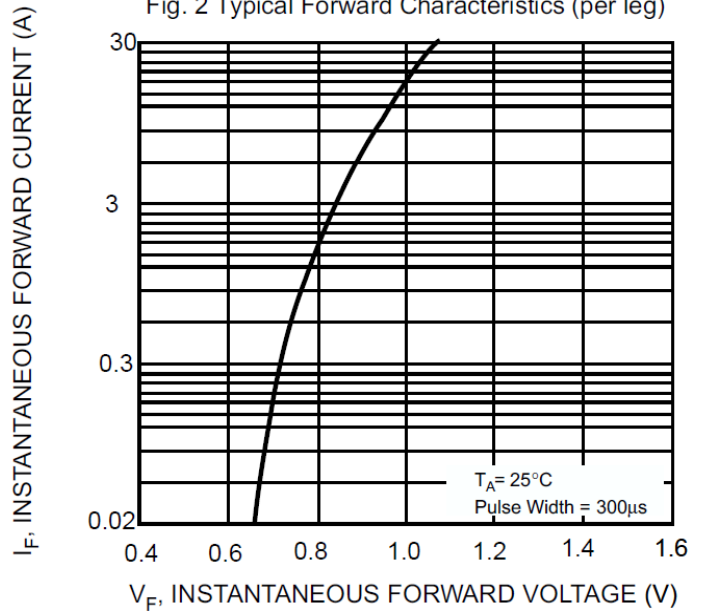


Fig. 3 Maximum Peak Forward Surge Current (per leg)

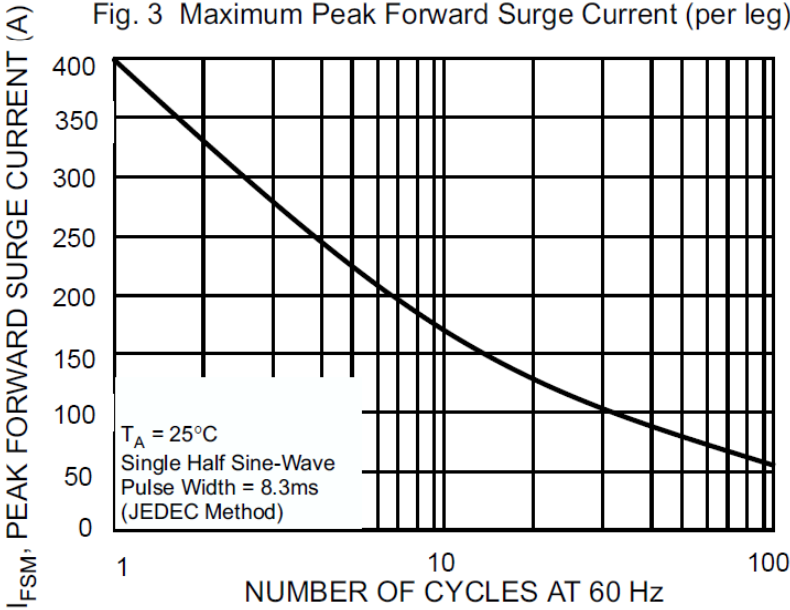
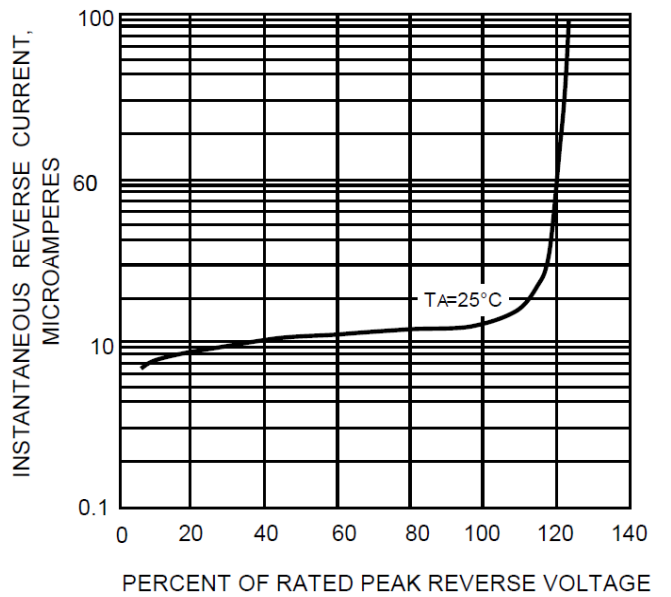


Fig. 4 Typical Junction Capacitance



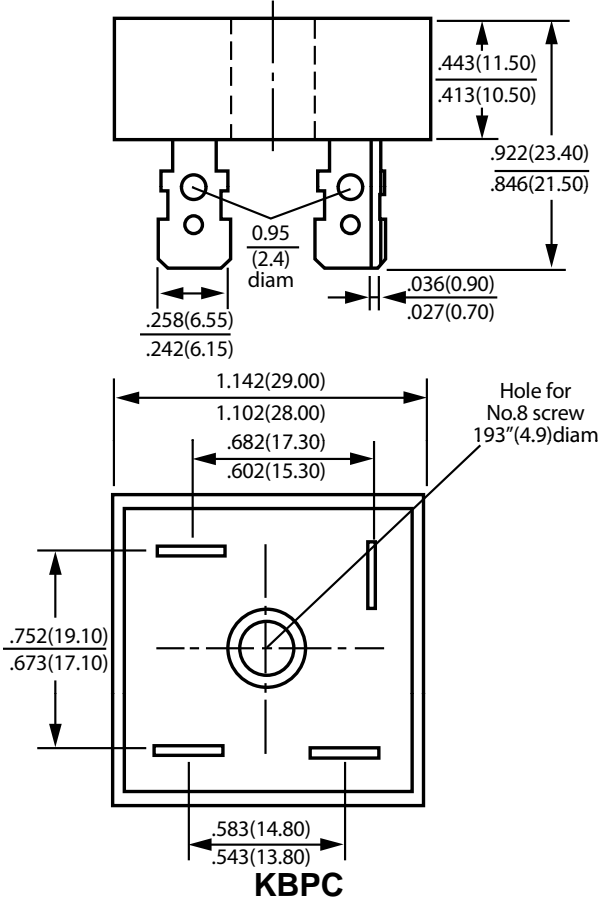


KBPC50005 thru KBPC5010



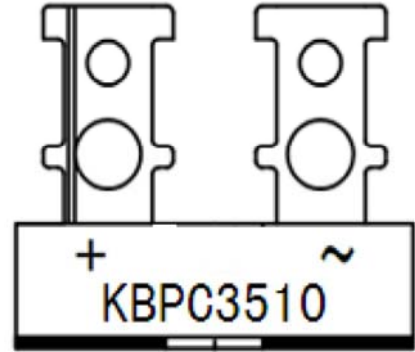
Glass Passivated Bridge Rectifiers

Package Outline Dimensions



Dimensions in inches and (millimeters)

Marking Information



Bulk Packing

Package	Inner	Inner Box	Inner Box	Carton	Carton Size	Gross Weight
	Pack	(EA)	(mm)	(EA)	(mm)	(K)-Approx.
KBPC	BOX	50	200*170*34	400	360*215*150	0.4