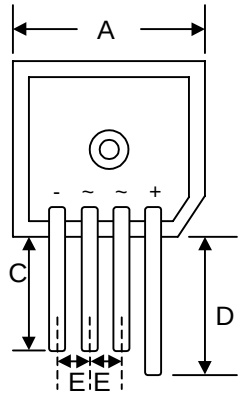
KBPC1000GS – KBPC1010GS

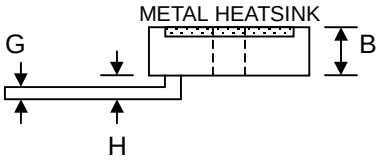
10A GLASS PASSIVATED IN-LINE BRIDGE RECTIFIER

Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards
- Designed for Saving Mounting Space



KBPC-S		
Dim	**Min**	**Max**
A	28.40	28.70
B	10.97	11.23
C	13.90	—
D	19.10	—
E	5.10	—
G	1.20 Ø Typical	
H	3.05	3.60
All Dimensions in mm		



Mechanical Data

- Case: Epoxy Case with Heat Sink Internally Mounted in the Bridge Encapsulation
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 30 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

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

Characteristic	Symbol	KBPC 1000GS	KBPC 1001GS	KBPC 1002GS	KBPC 1004GS	KBPC 1006GS	KBPC 1008GS	KBPC 1010GS	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current @T_A = 50°C	I_O	10							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200							A
Forward Voltage (per element) @I_F = 5.0A	V_{FM}	1.1							V
Peak Reverse Current @T_C= 25°C At Rated DC Blocking Voltage @T_C= 125°C	I_R	5.0 500							µA
Rating for Fusing (t < 8.3ms) (Note 1)	I^2t	374							A^2s
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.0							K/W
RMS Isolation Voltage from Case to Lead	V_{ISO}	2500							V
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150							°C

Note: 1. Non-repetitive for t > 1ms and < 8.3ms.
2. Thermal resistance junction to case per element mounted on 220 x 220 x 50mm thick AL plate.

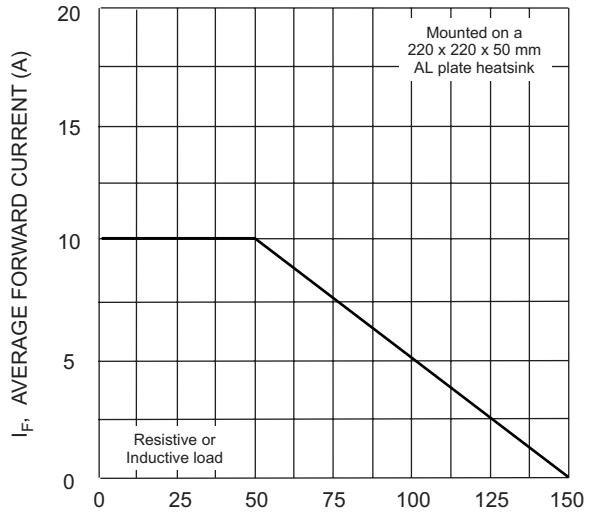


Fig. 1 Forward. Current Derating Curve

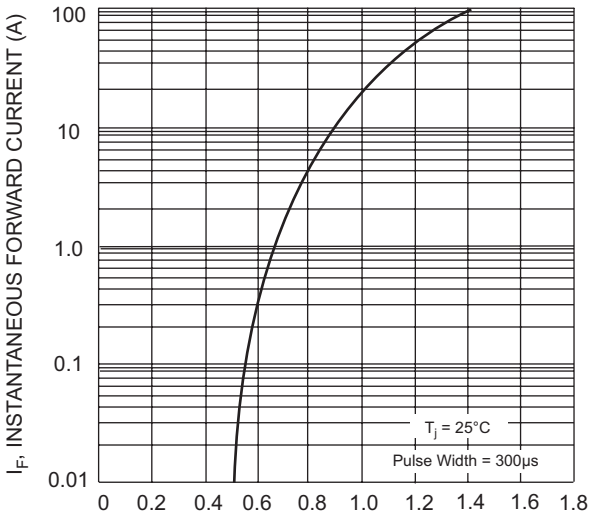


Fig. 2 Typical Forward Characteristics (per element)

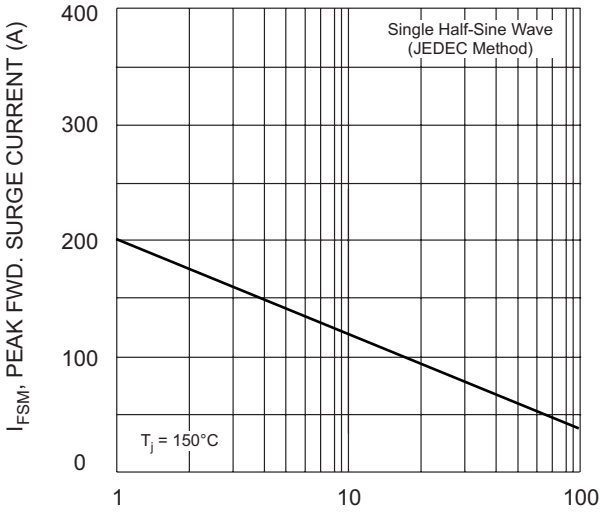


Fig. 3 Max Non-Repetitive Surge Current

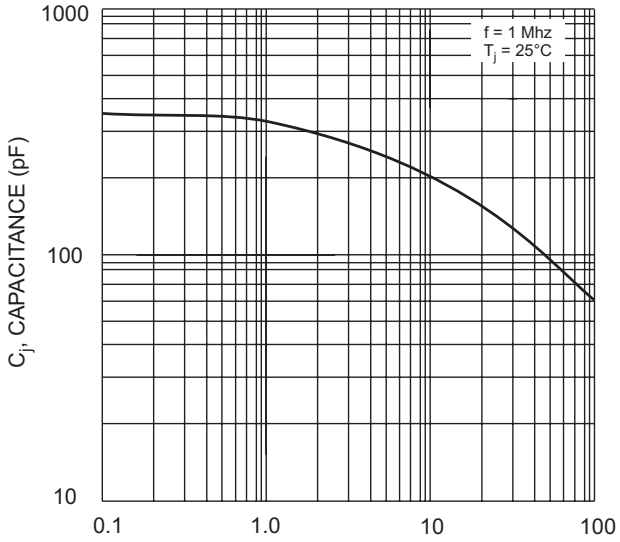


Fig. 4 Typical Junction Capacitance (per element)

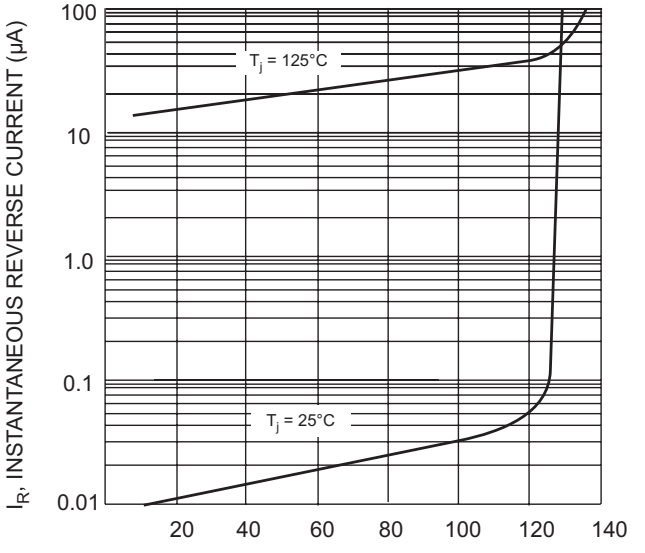


Fig. 5 Typical Reverse Characteristics (per element)

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
KBPC1000GS	SIL Bridge	72 Units/Box
KBPC1001GS	SIL Bridge	72 Units/Box
KBPC1002GS	SIL Bridge	72 Units/Box
KBPC1004GS	SIL Bridge	72 Units/Box
KBPC1006GS	SIL Bridge	72 Units/Box
KBPC1008GS	SIL Bridge	72 Units/Box
KBPC1010GS	SIL Bridge	72 Units/Box

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

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