

# **2KBP005M - 2KBP10M**



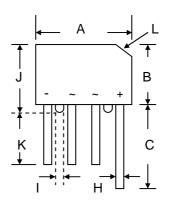
### 2.0A GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

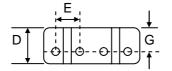
### **Features**

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards
- Recognized File # E157705

## **Mechanical Data**

- Case: KBPM, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 1.7 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS / Lead Free Version,
  Add "-LF" Suffix to Part Number, See Page 4





KBPM				
Dim	Min	Max		
Α	14.22	15.24		
В	10.67	11.68		
С	15.20			
D	4.30	4.70		
E	3.60	4.10		
G	2.75	3.15		
Н	0.76	0.86		
I	1.52			
J	11.68	12.70		
K	12.7			
L	3.2 x 45° Typical			
All Dimensions in mm				

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

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

Characteristic		Symbol	2KBP 005M	2KBP 01M	2KBP 02M	2KBP 04M	2KBP 06M	2KBP 08M	2KBP 10M	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		VRRM VRWM VR	50	100	200	400	600	800	1000	>
RMS Reverse Voltage		VR(RMS)	35	70	140	280	420	560	700	V
Average Rectified Output Current	@T <sub>A</sub> = 55°C	lo				2.0				А
Non-Repetitive Peak Forward Surge C 8.3ms Single half sine-wave superimporated load (JEDEC Method)		IFSM				60				А
Forward Voltage per leg	@I <sub>F</sub> = 2.0A	VFM	1.1			V				
Peak Reverse Current At Rated DC Blocking Voltage	@T <sub>A</sub> = 25°C @T <sub>A</sub> = 125°C	lгм	5.0 500			μΑ				
Rating for Fusing (t<8.3ms)		l <sup>2</sup> t				15				A <sup>2</sup> s
Typical Junction Capacitance per leg (I	Note 1)	Cj				25				pF
Typical Thermal Resistance per leg (Note 2)		RθJA RθJL	30 11				°C/W			
Operating and Storage Temperature Range		Tj, Tstg		_	-:	55 to +16	55			°C

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

2. Mounted on PC board with 12mm<sup>2</sup> copper pad.

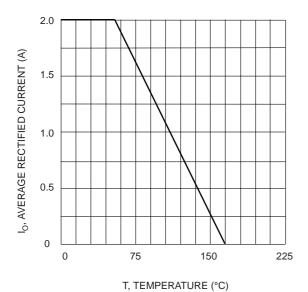


Fig. 1 Forward Current Derating Curve

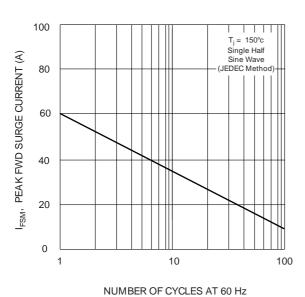
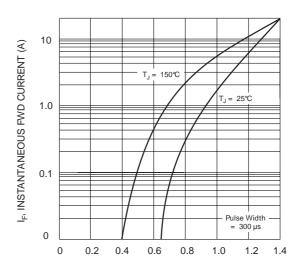
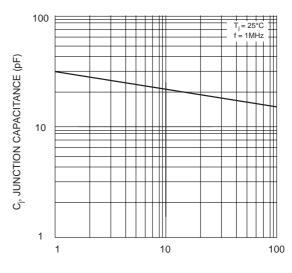


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current



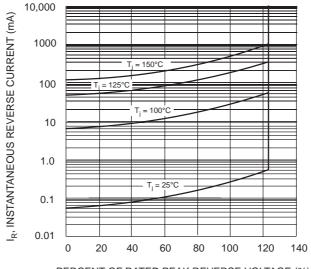
 $V_{\mathsf{F}}$ , INSTANTANEOUS FWD VOLTAGE (V)

Fig. 2 Typical Fwd Characteristics



V<sub>R</sub>, REVERSE VOLTAGE (V)

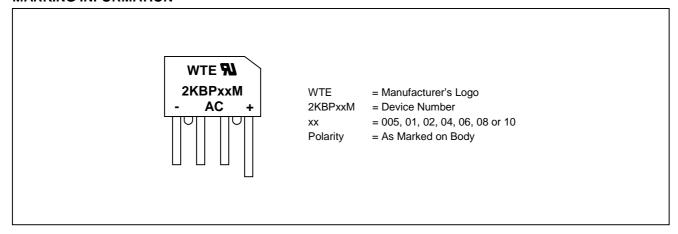
Fig. 4 Typical Junction Capacitance



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)

Fig. 5 Typical Reverse Characteristics

## **MARKING INFORMATION**



## **PACKAGING INFORMATION**

## **BULK**

Inner Box Size	Quantity	Carton Size	Quantity	Approx. Gross Weight (KG)
L x W x H (mm)	(PCS)	L x W x H (mm)	(PCS)	
200 x 160 x 42	600	425 x 215 x 280	7,200	17.0

Note: 1. Paper box, white or brown color.

#### **ORDERING INFORMATION**

Product No.	Package Type	Shipping Quantity
2KBP005M	SIL Bridge	600 Units/Box
2KBP01M	SIL Bridge	600 Units/Box
2KBP02M	SIL Bridge	600 Units/Box
2KBP04M	SIL Bridge	600 Units/Box
2KBP06M	SIL Bridge	600 Units/Box
2KBP08M	SIL Bridge	600 Units/Box
2KBP10M	SIL Bridge	600 Units/Box

- Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
- To order Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, 2KBP005M-LF.

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