

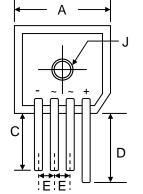
# **KBPC10S SERIES**

### 10A SINGLE PHASE BRIDGE RECTIFIER

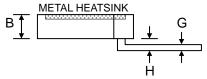


### **Features**

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- Low Thermal Resistance
- High Surge Current Capability
- Vertical Mount Ideally Suited for Space Constrained Applications
- Recognized File # E157705



KBPC-S				
Dim	Min	Max		
Α	28.30	28.80		
В	10.77	11.23		
С	13.90	_		
D	19.00	_		
Е	4.60	5.60		
G	1.20 Ø Typical			
Н	3.05	3.60		
J	5.08 Ø Nominal			
All Dimensions in mm				



# **Mechanical Data**

- Case: Epoxy Case with Heatsink Internally Mounted in the Bridge Encapsulation
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Mounting: Through Hole with #10 Screw
- Mounting Torque: 2.0 N.m Max.
- Weight: 21 grams (approx.)
- Marking: Type Number
- Lead Free: For RoHS / Lead Free Version,
  Add "-LF" Suffix to Part Number, See Page 4

# 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	KBPC10						Unit		
Characteristic	Syllibol	00S	01S	02S	04S	06S	08S	10S	12S	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	50	100	200	400	600	800	1000	1200	V
RMS Reverse Voltage	VR(RMS)	35	70	140	280	420	560	700	840	V
Average Rectified Output Current @T <sub>C</sub> = 55°C	lo	10			Α					
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM	250				А				
Forward Voltage per leg @I <sub>F</sub> = 5.0A	VFM	1.1				V				
Peak Reverse Current $@T_C = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_C = 125^{\circ}C$	IRM	10 500			μΑ					
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	l <sup>2</sup> t	260			A <sup>2</sup> s					
Typical Junction Capacitance (Note 1)	Сл	200			pF					
Typical Thermal Resistance (Note 2)	R JC	1.9			°C/W					
RMS Isolation Voltage, t = 1min	Viso	2500			V					
Operating and Storage Temperature Range	ТJ, Tsтg	-55 to +150		°C						

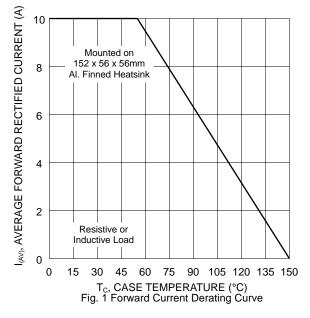
Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

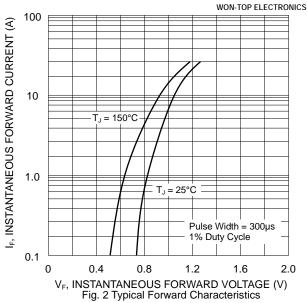
2. Thermal resistance junction to case, mounted on 152 x 56 x 56mm Al. heatsink.

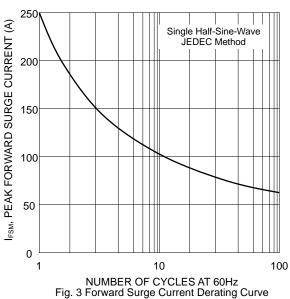
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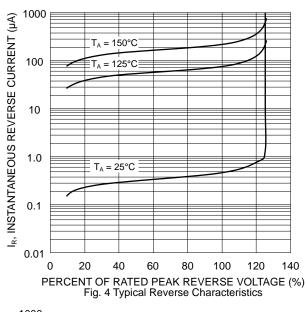
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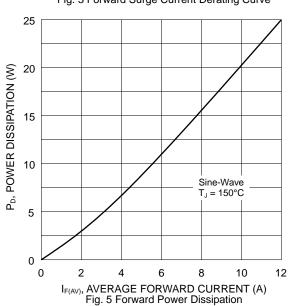


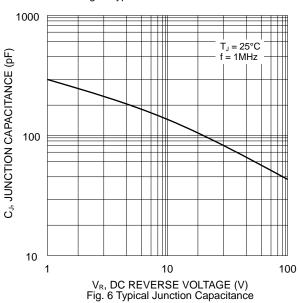














# **MARKING INFORMATION**



KBPC10xxS = Device Number

xx = 00, 01, 02, 04, 06, 08, 10 or 12

Polarity = As Marked on Body

### **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)	
195 x 195 x 40	78	405 x 205 x 240	780	17.0

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



#### **ORDERING INFORMATION**

Product No.	Package Type	Shipping Quantity
KBPC10xxS	SIL Bridge	78 Units/Box

- Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
- To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, KBPC1000S-LF. 2.

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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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