INTERNATIONAL RECTIFIER



2KBP SERIES

2A single phase rectifier bridge

Maximum Ratings					
		2KBP	Units		
10		2.0	Α		
FSM	50Hz	60	А		
	60Hz	63	Α		
l ² t	50Hz	18	A ² s		
	60Hz	16	A ² s		
V _{RRM}		50 to 1000	V		
Circuit 10					
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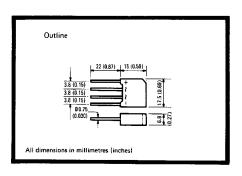
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#### Description

A 2A single phase encapsulated bridge rectifier consisting of four single diodes connected as a full bridge. They are intended for general applications in industrial and consumer equipment.

#### **Features**

- · Suitable for printed circuit board mounting
- · Compact construction
- · High surge current capability



### **Electrical specifications**

	_	2KBP	Units	Conditions		
I _O	Maximum DC output current	2.0	Α	T _{amb} = 50° C, Resistive or inductive load		
	current	1.8	Α	T _{amb} = 50° C, Capacitive load		
FSM	Maximum peak one cycle, non-repetitive surge current	60	Α	t = 10ms, 20ms	Following any rated load condition and with rated VRRM reapplied	
		63	Α	t = 8.3ms, 16.7ms		
	Maximum I ² t capability	18	A ² s	t = 10ms	Initial $T_J = T_J \text{ max}$ 100% $V_{RRM}$ reapplied	
	for fusing	16	A ² s	t = 8.3ms		
		26	A ² s	t = 10ms	Initial T _J = T _J max No voltage reapplied	
		23	A ² s	t = 8.3ms		
$J^2\sqrt{t}$	Maximum $1^2\sqrt{t}$ capability for fusing	255	A ² √s	t = 0.1 to 10ms, no voltage reapplied		
V _{FM}	Maximum peak forward voltage per diode	1.0	, V	I _{FM} = 1A, T _J = 25°C		
I _{RM}	Typical peak reverse leakage current per diode	10	μΑ	T _J = 25° C	100% V _{RRM}	
		1.0	mA	T _J = 150°C		
f	Operating frequency range	40 to 1000	Hz			

### Thermal and mechanical specifications

	_	2KBP	Units	Conditions
TJ	Operating temperature range	-40 to 150	°C	
T _{stg}	Storage temperature range	-40 to 150	°C	
W	Approximate weight	4 (0.14)	g (oz)	

### Voltage specifications

Part number	V _{RRM} . Maximum repetitive peak reverse voltage	V _{RSM} . Maximum non- repetitive peak reverse voltage	V _{RMS} . Maximum recommended RMS supply voltage
	V	V	V
2KBP005	50	50	20
2KBP02	200	200	80
2KBP04	400	400	125
2KBP06	600	600	250
2KBP08	800	800	380
2KBP10	1000	1000	500

2.2 2.0 1.8 4 1.6 5 1.0 6 0.8 7 1.0 8 0.8 7 0.8 8 0.8 7 0.8 8 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8 9 0.8

Maximum Allowable Ambient Temperature - °C

Fig. 1 - Ambient Temperature Ratings



