

INTERNATIONAL RECTIFIER



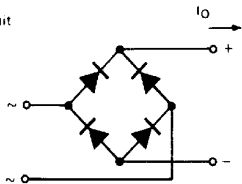
2KBP SERIES

2A single phase rectifier bridge

Maximum Ratings

	2KBP	Units
I_O	2.0	A
I_{FSM}	50Hz	60
	60Hz	63
I^2t	50Hz	18
	60Hz	16
V_{RRM}	50 to 1000	V

Circuit



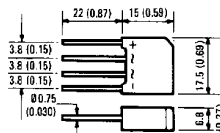
Description

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

Outline



All dimensions in millimetres (inches)

Electrical specifications

		2KBP	Units	Conditions
I_O	Maximum DC output current	2.0	A	$T_{amb} = 50^\circ\text{C}$, Resistive or inductive load
		1.8	A	$T_{amb} = 50^\circ\text{C}$, Capacitive load
I_{FSM}	Maximum peak one cycle, non-repetitive surge current	60	A	$t = 10\text{ms}, 20\text{ms}$
		63	A	$t = 8.3\text{ms}, 16.7\text{ms}$
I^2t	Maximum I^2t capability for fusing	18	A^2s	$t = 10\text{ms}$
		16	A^2s	$t = 8.3\text{ms}$
		26	A^2s	$t = 10\text{ms}$
		23	A^2s	$t = 8.3\text{ms}$
$I^2\sqrt{t}$	Maximum $I^2\sqrt{t}$ capability for fusing	255	$\text{A}^2\sqrt{\text{s}}$	$t = 0.1$ to 10ms , no voltage reapplied
V_{FM}	Maximum peak forward voltage per diode	1.0	V	$I_{FM} = 1\text{A}$, $T_J = 25^\circ\text{C}$
I_{RM}	Typical peak reverse leakage current per diode	10	μA	$T_J = 25^\circ\text{C}$
		1.0	mA	$T_J = 150^\circ\text{C}$
f	Operating frequency range	40 to 1000	Hz	

Thermal and mechanical specifications

		2KBP	Units	Conditions
T_J	Operating temperature range	-40 to 150	$^\circ\text{C}$	
T_{stg}	Storage temperature range	-40 to 150	$^\circ\text{C}$	
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

Fig. 1 – Ambient Temperature Ratings

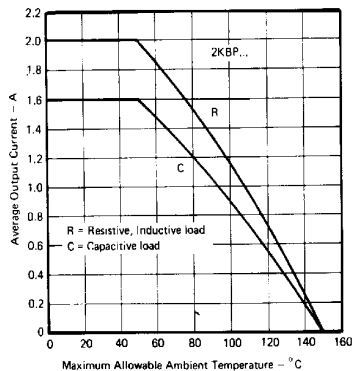


Fig. 2 – Non-Repetitive Surge Ratings

