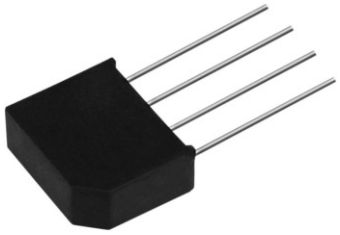
Single Phase Rectifier Bridge, 2 A



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FEATURES

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

RoHS COMPLIANT

DESCRIPTION

A 2 A 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.

PRODUCT SUMMARY	
I_O	2 A
V_{RRM}	50 to 1000 V

MAJOR RATINGS AND CHARACTERISTICS			
SYMBOL	CHARACTERISTICS	VALUES	UNITS
I_O		2.0	A
I_{FSM}	50 Hz	60	A
	60 Hz	63	
I^2t	50 Hz	18	A^2s
	60 Hz	16	
V_{RRM}		50 to 1000	V
T_J		- 40 to 150	°C

ELECTRICAL SPECIFICATIONS

VOLTAGE RATINGS			
PART NUMBER	V_{RRM}, MAXIMUM REPETITIVE PEAK REVERSE VOLTAGE (V)	V_{RSM}, MAXIMUM NON-REPETITIVE PEAK REVERSE VOLTAGE (V)	V_{RMS}, MAXIMUM RECOMMENDED RMS SUPPLY VOLTAGE (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

FORWARD CONDUCTION						
PARAMETER	**SYMBOL**	**TEST CONDITIONS**			**VALUES**	**UNITS**
Maximum DC output current	I_O	T_A = 50 °C, resistive or inductive load			2.0	A
		T_A = 50 °C, capacitive load			1.8	
Maximum peak one cycle, non-repetitive surge current	I_{FSM}	t = 10 ms, 20 ms	Following any rated load condition and with rated V_{RRM} reapplied		60	A
		t = 8.3 ms, 16.7 ms			63	
Maximum I^2t capability for fusing	I^2t	t = 10 ms	100 % V_{RRM} reapplied	Initial T_J = T_J maximum	18	A^2s
		t = 8.3 ms			16	
		t = 10 ms	No voltage reapplied		26	
		t = 8.3 ms			23	
Maximum $I^2\sqrt{t}$ capability for fusing	$I^2\sqrt{t}$	t = 0.1 to 10 ms, no voltage reapplied			255	$A^2\sqrt{s}$
Maximum peak forward voltage per diode	V_{FM}	I_{FM} = 1 A, T_J = 25 °C			1.0	V
Typical peak reverse leakage current per diode	I_{RM}	T_J = 25 °C, 100 % V_{RRM}			10	µA
		T_J = 150 °C, 100 % V_{RRM}			1.0	mA
Operating frequency range	f				40 to 1000	Hz

THERMAL AND MECHANICAL SPECIFICATIONS			
PARAMETER	**SYMBOL**	**VALUES**	**UNITS**
Operating junction and storage temperature range	T_J, T_{Stg}	- 40 to 150	°C
Approximate weight		4	g
		0.14	oz.

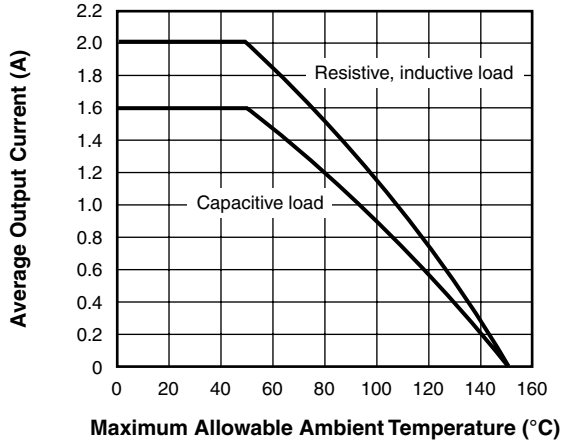


Fig. 1 - Ambient Temperature Ratings

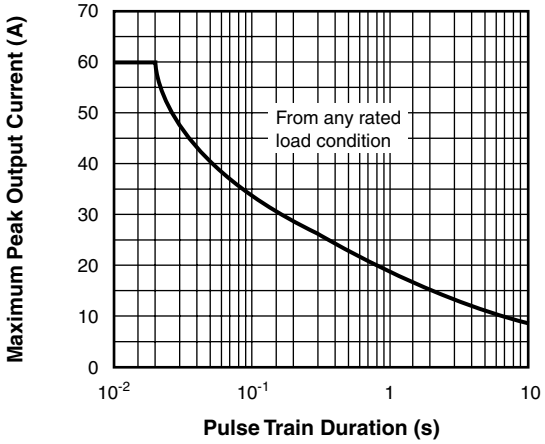
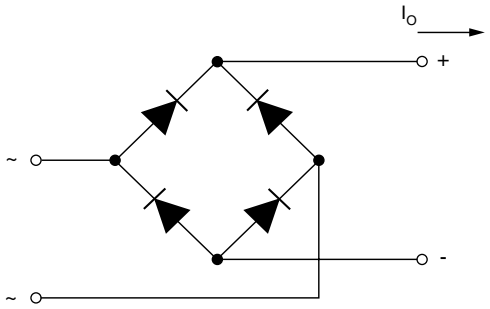


Fig. 2 - Non-Repetitive Surge Ratings

CIRCUIT CONFIGURATION



LINKS TO RELATED DOCUMENTS	
Dimensions	http://www.vishay.com/doc?95329

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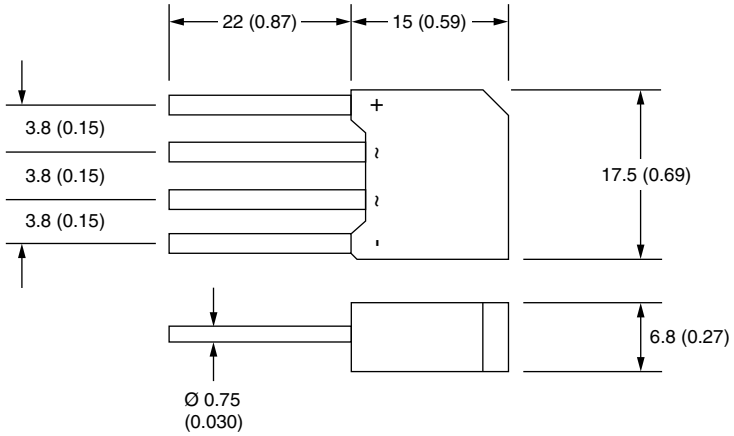
DIMENSIONS in millimeters (inches)



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