

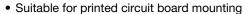
Single Phase Bridge Rectifier, 2 A

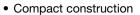


D-44

PRODUCT SUMMARY		
I _O	2 A	
V _{RRM}	50 V to 1000 V	
Package	D-44	
Circuit	Single phase bridge	

FEATURES





RoHS

- · High surge current capability
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

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.

MAJOR RATINGS AND CHARACTERISTICS				
SYMBOL	CHARACTERISTICS	VALUES	UNITS	
I _O		2.0	А	
I _{FSM}	50 Hz	60		
	60 Hz	63	A	
l ² t	50 Hz	18	A ² s	
	60 Hz	16	A-S	
V _{RRM}		50 to 1000	V	
TJ		-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)	
VS-2KBP005	50	50	20	
VS-2KBP01	100	100	50	
VS-2KBP02	200	200	80	
VS-2KBP04	400	400	125	
VS-2KBP06	600	600	250	
VS-2KBP08	800	800	380	
VS-2KBP10	1000	1000	500	



FORWARD CONDUCTION						
PARAMETER	SYMBOL	TEST CONDITIONS			VALUES	UNITS
Manifesture DC autout assessed		T _A = 50 °C, resistive or inductive load		2.0	^	
Maximum DC output current	I _O	T _A = 50 °C, capacitive load			1.8	А
Maximum peak one cycle,	_	t = 10 ms, 20 ms	Following any rated load condition and with rated V _{RRM} reapplied		60	^
non-repetitive surge current	IFSM	t = 8.3 ms, 16.7 ms			63	A
Maximum I ² t capability for fusing	l ² t	t = 10 ms	100 % V _{RRM}	Initial T _J = T _J maximum	18	A ² s
		t = 8.3 ms	reapplied		16	
		t = 10 ms	No voltage		26	
		t = 8.3 ms	reapplied		23	
Maximum I ² √t capability for fusing	I ² √t	t = 0.1 to 10 ms, no voltage reapplied			255	A²√s
Maximum peak forward voltage per diode	V_{FM}	I _{FM} = 1 A, T _J = 25 °C		1.0	V	
Typical peak reverse leakage	I _{RM}	T _J = 25 °C, 100 % V _{RRM}		10	μA	
current per diode		T _J = 150 °C, 100 % V	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	
Approximate weight		0.14	oz.	

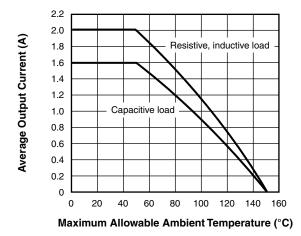


Fig. 1 - Ambient Temperature Ratings

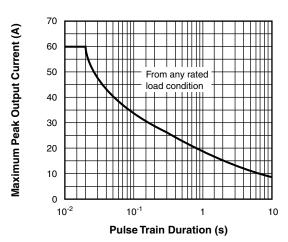
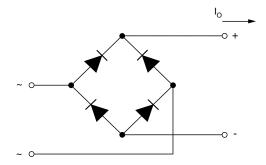


Fig. 2 - Non-Repetitive Surge Ratings

CIRCUIT CONFIGURATION

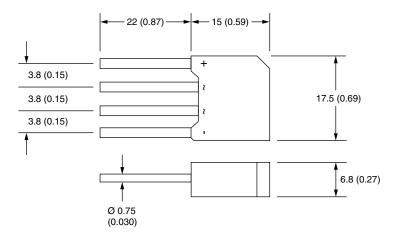


LINKS TO RELATED DOCUMENTS		
Dimensions	www.vishay.com/doc?95329	



D-44

DIMENSIONS in millimeters (inches)





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Vishay

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