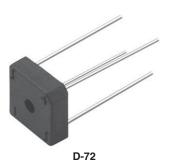


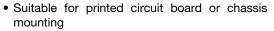
Vishay Semiconductors

Single Phase Rectifier Bridge, 8 A



PRIMARY CHARACTERISTICS		
I _O	8.0 A	
V _{RRM}	50 V to 1000 V	
Package	D-72	
Circuit configuration	Single phase bridge	

FEATURES





- Compact construction
- High surge current capability
- Fully characterized data
- Wide temperature range
- Material categorization: for definitions of compliance please see <u>www.vishav.com/doc?99912</u>

DESCRIPTION

The VS-KBPC series of single phase rectifier bridge consists of four silicon junctions connected as a full bridge. These device are intended for general use in industrial and consumer equipment.

SYMBOL	CHARACTERISTICS	VALUES	UNITS
	Resistive load	8	Α
Io	Capacitive load	6.4	
	T _C	50	°C
1	50 Hz	125	Α
I _{FSM}	60 Hz	137	
I ² t	50 Hz	110	A ² s
	60 Hz	100	A ^z S
V_{RRM}	Range	50 to 1000	V
TJ		-55 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	
VS-KBPC8005	50	80	
VS-KBPC801	100	150	
VS-KBPC802	200	300	
VS-KBPC804	400	500	
VS-KBPC806	600	700	
VS-KBPC808	800	900	
VS-KBPC810	1000	1100	



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FORWARD CONDUCTION					
PARAMETER	SYMBOL	TEST CONDITIONS		VALUES	UNITS
Maximum DC output current	Io	T _C = 50 °C, resistive or inductive load		8.0	
Maximum DC output current		T _C = 50 °C, capacitive load		6.4	
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	125	А
		t = 8.3 ms, 16.7 ms		137	
	l ² t	t = 10 ms	Initial T _J = T _J maximum 100 % V _{RRM} reapplied	78	A ² s
Maximum 12t annahility fay fysing		t = 8.3 ms		71	
Maximum I ² t capability for fusing		t = 10 ms		110	
		t = 8.3 ms		1000	
Maximum I ² √t capability for fusing	I ² √t	t = 0.1 to 10 ms, no voltage reapplied		1105	A²√s
Maximum peak forward voltage per diode	V_{FM}	I _{FM} = 3.0 A, T _J = 25 °C		1.0	V
Turinal analysis and lands are still de-		T _J = 25 °C, 100 % V _{RRM}		10	μΑ
Typical peak reverse leakage per diode		$T_{\rm J} = 150 ^{\circ}\text{C}, 100 \% V_{\rm RRM}$		1.0	mA
Operating frequency range	f			400 to 1000	Hz
Maximum repetitive peak reverse voltage range	V_{RRM}			50 to 1000	V

THERMAL AND MECHANICAL SPECIFICATIONS			
PARAMETER	SYMBOL	VALUES	UNITS
Operating and storage temperature range	T _J , T _{Stg}	-55 to +150	°C
Thermal resistance, junction to case	R _{thJC}	6	K/W
Approximate weight		6	g
		0.21	OZ.

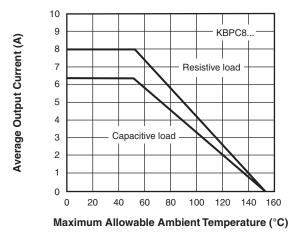


Fig. 1 - Current Ratings



Fig. 2 - Non-Repetitive Surge Ratings

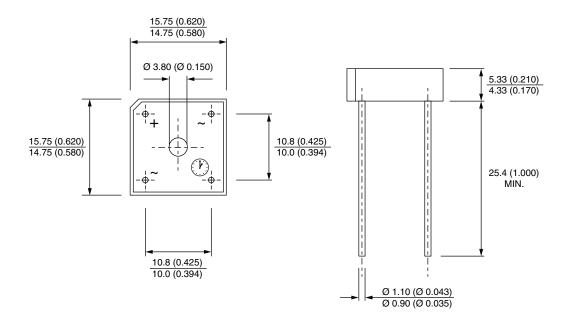
LINKS TO RELATED DOCUMENTS		
Dimensions	www.vishay.com/doc?95250	



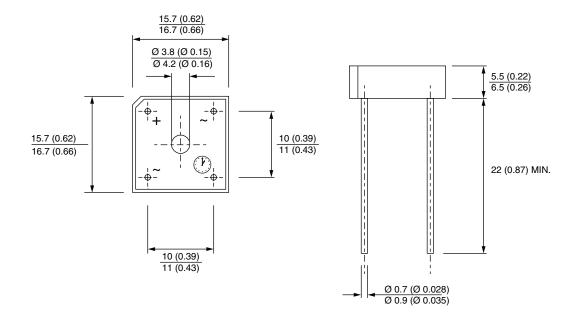
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D-72

DIMENSIONS in millimeters (inches): **KBPC6**, **KBPC8**



DIMENSIONS in millimeters (inches): **KBPC1**





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