

FORWARD CONDUCTION						
PARAMETER	SYMBOL	TEST CONDITIONS		KBPC1	KBPC6	UNITS
Maximum DC output current	I <sub>O</sub>	T <sub>C</sub> = 50 °C, resistive or inductive load		3.0	6.0	A
		T <sub>C</sub> = 50 °C, capacitive load		2.4	4.7	
Maximum peak one cycle, non-repetitive surge current	I <sub>FSM</sub>	t = 10 ms, 20 ms	Following any rated load condition and with rated V <sub>RRM</sub> reapplied	50	125	
		t = 8.3 ms, 16.7 ms		55	137	
Maximum I <sup>2</sup> t capability for fusing	I <sup>2</sup> t	t = 10 ms	Initial T <sub>J</sub> = T <sub>J</sub> maximum 100 % V <sub>RRM</sub> reapplied	12.5	78	A <sup>2</sup> s
		t = 8.3 ms		11.4	71	
		t = 10 ms		17.7	110	
		t = 8.3 ms		16.1	1000	
Maximum I <sup>2</sup> √t capability for fusing	I <sup>2</sup> √t	t = 0.1 ms to 10 ms, no voltage reapplied		177	1105	A <sup>2</sup> √s
Maximum peak forward voltage per diode	V <sub>FM</sub>	I <sub>FM</sub> = 0.5 x I <sub>O</sub> , T <sub>J</sub> = 25 °C		1.1	1.2	V
Typical peak reverse leakage per diode	I <sub>RM</sub>	T <sub>J</sub> = 25 °C, 100 % V <sub>RRM</sub>		10	10	mA
		T <sub>J</sub> = 150 °C, 100 % V <sub>RRM</sub>		1.0	1.0	
Operating frequency range	f			40 to 1000		Hz
Maximum repetitive peak reverse voltage range	V <sub>RRM</sub>			50 to 1000		V

THERMAL AND MECHANICAL SPECIFICATIONS				
PARAMETER	SYMBOL	KBPC1	KBPC6	UNITS
Operating and storage temperature range	$T_J$ , $T_{Stg}$	- 40 to 150		$^{\circ}\text{C}$
Thermal resistance, junction to case	$R_{thJC}$	-	-	K/W
Approximate weight		5	6	g
		0.18	0.21	oz.

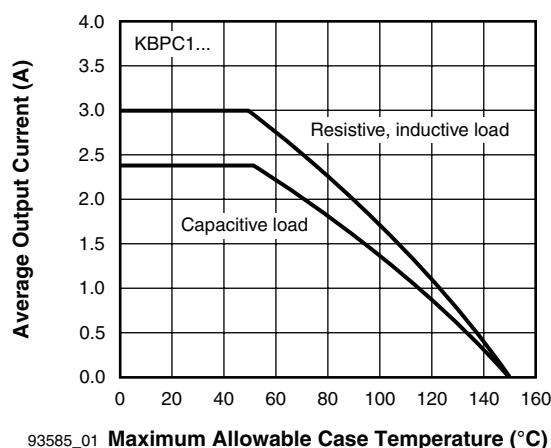


Fig. 1 - Case Temperature Ratings

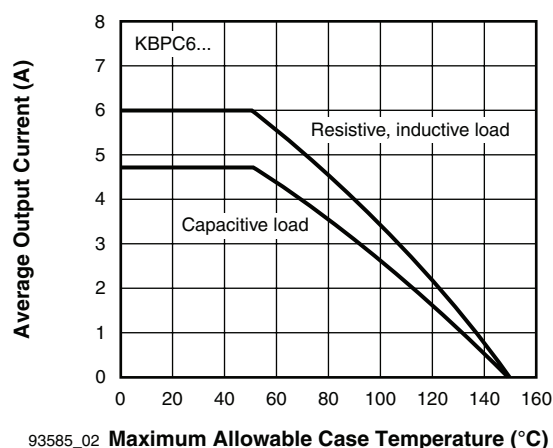


Fig. 2 - Case Temperature Ratings

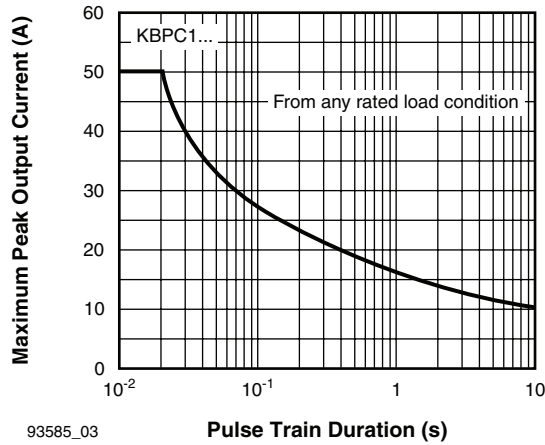


Fig. 3 - Non-Repetitive Surge Ratings

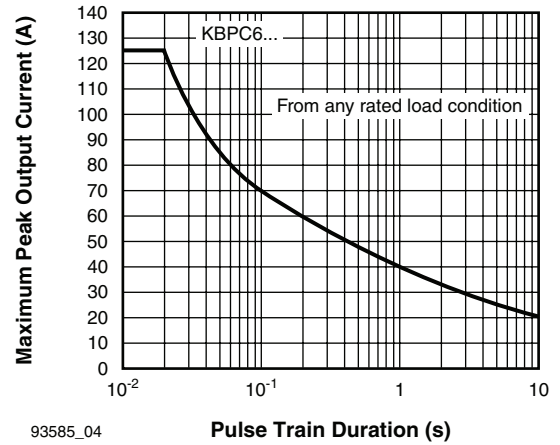
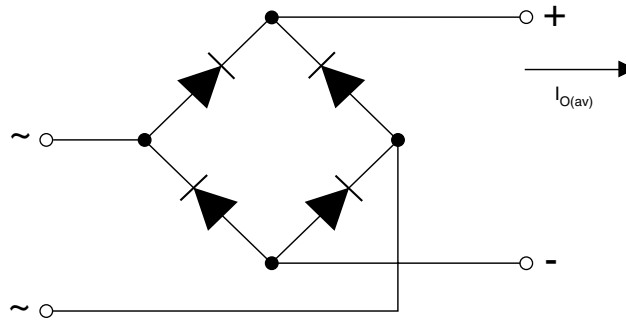


Fig. 4 - Non-Repetitive Surge Ratings

### CIRCUIT CONFIGURATION



### LINKS TO RELATED DOCUMENTS

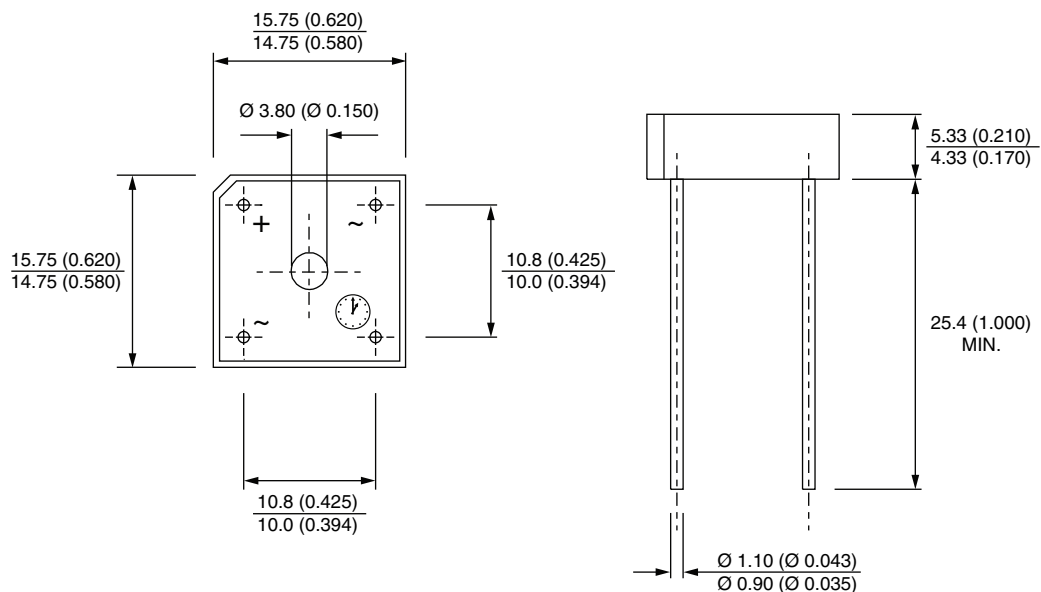
Dimensions

[www.vishay.com/doc?95250](http://www.vishay.com/doc?95250)

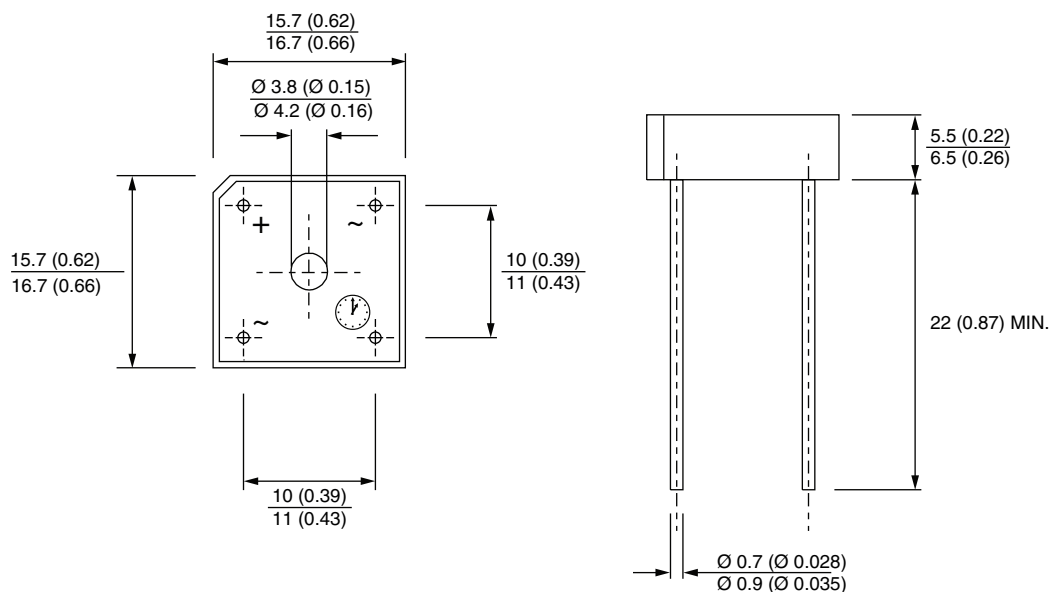


## D-72

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



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





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