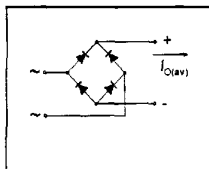


KBPC8 SERIES

8A Single Phase Rectifier Bridge

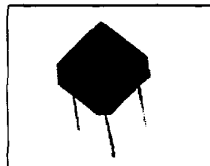
- * Suitable for printed circuit board or chassis mounting.
- * Compact construction.
- * High surge current capability.
- * Fully characterised data.
- * Wide temperature range.



$I_{O(av)} = 8.0 \text{ A}$
 V_{RRM} range
 50 to 1000V

Description

The KBPC8 Series of Single Phase Rectifier Bridges consists of four silicon junctions connected as a full bridge. These devices are intended for general use in industrial and consumer equipment.



Electrical Specification

	KBPC8...	Units	Conditions
I_O Maximum DC output current	8.0	A	$T_C = 50^\circ\text{C}$, Resistive or inductive load
	6.4	A	$T_C = 50^\circ\text{C}$, Capacitive load
I_{FSM} Maximum peak one cycle, non-repetitive surge current	125	A	$t = 10\text{ms}$, 20ms
	137	A	$t = 8.3\text{ms}$, 16.7ms
I^2t Maximum I^2t capability for fusing	78	A^2s	$t = 10\text{ms}$
	71	A^2s	$t = 8.3\text{ms}$
	110	A^2s	$t = 10\text{ms}$
	100	A^2s	$t = 8.3\text{ms}$
P_{Vt} Maximum I^2Vt capability for fusing	1105	A^2Vs	$t = 0.1$ to 10ms , no voltage reapplied
V_{FM} Maximum peak forward voltage per diode	1.0	V	$I_{FM} = 3.0\text{A}$, $T_J = 25^\circ\text{C}$
I_{RM} Typical peak reverse leakage per diode	10	mA	$T_J = 25^\circ\text{C}$, 100% V_{RRM}
	100	mA	$T_J = 150^\circ\text{C}$, 100% V_{RRM}
f Operating frequency range	400 to 1000	Hz	
V_{RRM} Maximum repetitive peak reverse voltage range	50 to 1000	V	

Thermal and Mechanical Specifications

	KBPC8...	Units	Conditions
$T_{J,T_{stg}}$ Operating and storage temperature range	-55 to 150	$^\circ\text{C}$	
$R_{\theta JC}$ Thermal resistance, junctions to case	6	K/W	
W Approximate weight	6(0.21)	g (oz)	

KBPC8 SERIES



Voltage Specifications

Part Number	V_{RRM} , Maximum repetitive peak reverse voltage	V_{RSM} , Maximum non-repetitive peak reverse voltage
	V	V
KBPC8005	50	80
KBPC801	100	150
KBPC802	200	300
KBPC804	400	500
KBPC806	600	700
KBPC808	800	900
KBPC810	1000	1100

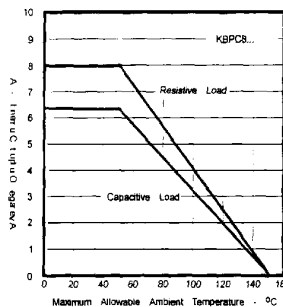


Fig. 1 - Current Ratings

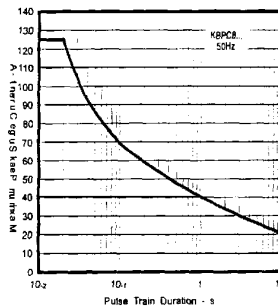
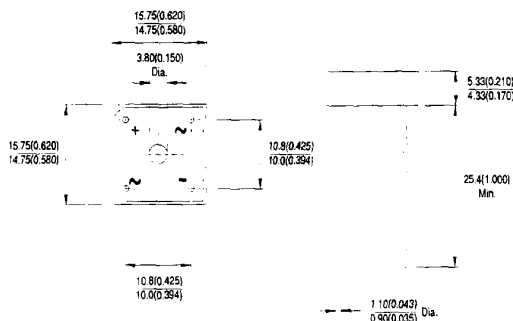


Fig. 2 - Non-Repetitive Surge Ratings

Outline



All dimensions in millimetres(inches)