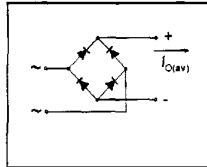


**8A Single Phase Rectifier Bridge**

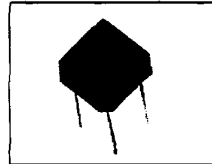
- \* Suitable for printed circuit board or chassis mounting.
- \* Compact construction.
- \* High surge current capability.
- \* Fully characterised data.
- \* Wide temperature range.



$I_{O(av)} = 8.0 \text{ A}$   
 $V_{RRM}$  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	$t = 10\text{ms}, 20\text{ms}$
	137	A	$t = 8.3\text{ms}, 16.7\text{ms}$
$I^2t$ Maximum $I^2t$ capability for fusing	78	$\text{A}^2\text{s}$	$t = 10\text{ms}$
	71	$\text{A}^2\text{s}$	$t = 8.3\text{ms}$
	110	$\text{A}^2\text{s}$	$t = 10\text{ms}$
	100	$\text{A}^2\text{s}$	$t = 8.3\text{ms}$
$P^2t$ Maximum $P^2t$ capability for fusing	1105	$\text{A}^2\text{s}$	$t = 0.1$ to $10\text{ms}$ , no voltage reappplied
$V_{FM}$ 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

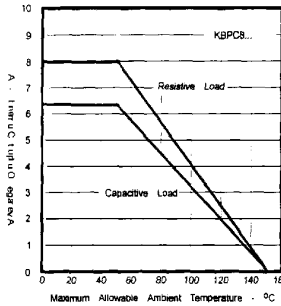


Fig. 1 - Current Ratings

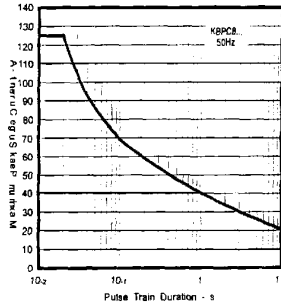
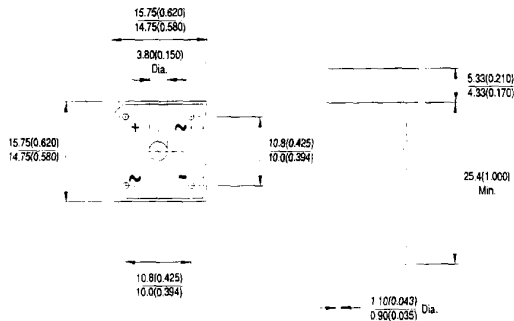


Fig. 2 - Non-Repetitive Surge Ratings

## Outline



All dimensions in millimetres (inches)