

Technical Information



Style JOF – Fixed Vitreous Enamelled Oval Section Power Resistor

Style JOA – Adjustable Vitreous Enamelled Oval Section Power Resistor

Introduction

The range of LPC Oval Section Power Resistors are available from 30 to 75 watts. They are RoHS Compliant and are mounted either singly or in multiple assemblies by means of nickel plated spacing brackets sprung into each end of the former.

Ordering Procedure

Fixed Resistors—Specify: Type, Ohmic Value, Tolerance. E.g. JOF55-200R ±5%

Adjustable Resistors—Specify: Type, Ohmic Value, Tappings, Tolerance. E.g. JOA55-200R-2T ±10%

General Notes

Ohmic Values

The range of ohmic values available are shown below. You may select any ohmic value between the max and min values.

Type		J030	J040	J055	J065	J075
Rating (Watts) @ 20°C		30	40	55	65	75
Ohmic Values (Without Tappings)	Min	10R0	10R0	10R0	10R0	10R0
	Max	1K5	3K3	6K8	6K8	10K0
Ohmic Values (With Tappings)	Min	-	15R0	22R0	33R0	47R0
	Max	-	2K2	3K3	4K7	4K7
Max No. of Tappings		-	1	2	3	4

Tolerance:

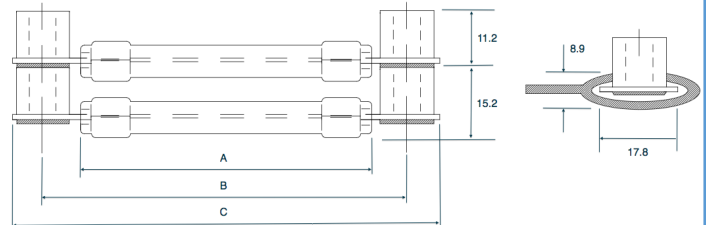
Fixed Over 10R ±5%

Fixed Less than or equal to 10R ±10%

All Adjustable ±10%

Dimensions

Type		J030	J040	J055	J065	J075
Dimensions	A	31.7	50.8	89.0	120.0	152.0
	B	50.8	69.8	108.0	140.0	171.0
	C	63.5	82.5	120.0	152.0	184.0



Product Details

The oval ceramic formers are non-hygroscopic, will withstand severe thermal shock and have a thermal coefficient of expansion that matches the component of the resistor. Resistance wires are of nickel-chromium alloy and the winding is uniform throughout the length of the former to prevent 'hot-spots' on load. The resistance wire is embedded in vitreous enamel and fired in finely controlled automatic tunnel kilns. This results in highly reliable resistors. The mounting brackets also serve as thermal conductors and the nominal ratings given assume their use. When the resistors are mounted in stacks it is necessary to reduce the wattage as shown below:

No. of units per stack	2	3	4	
Resistors mounted vertically	78%	74%	72%	of nominal
Resistors mounted horizontally	62%	54%	50%	of nominal

Maximum Operating Voltages

As a general rule voltage should be limited to a maximum of 1KV per 25mm of winding. However, if the resistor is mounted on a non-insulated material 2KV should be regarded as the absolute maximum.

Round Section High Power & Low Wattage Resistors

LPC also manufacture ranges of round section high power and low wattage resistors. For details please contact our technical staff or see our website.