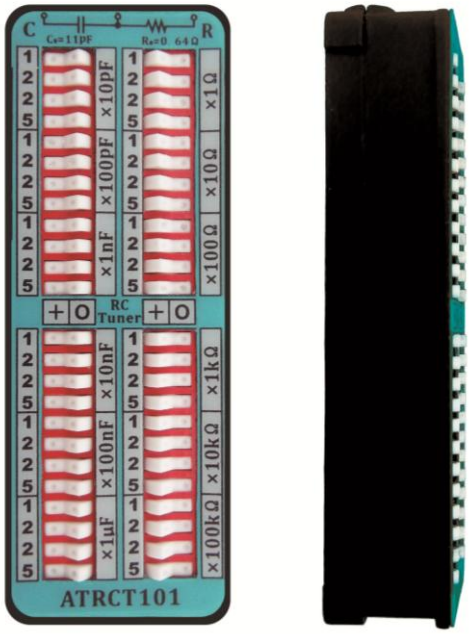


Figure 1. Photo of the ATRCT101

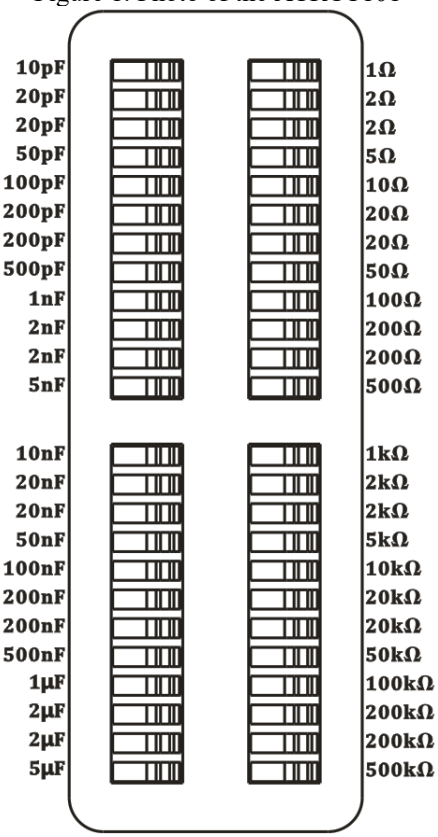


Figure 2. Numerical Distribution of the ATRCT101

FEATURES

Wide adjustable resistance range: 1Ω to 1000kΩ

Wide adjustable capacitance range: 10pF to 10μF

High resistance resolution: 1Ω

High capacitance resolution: 10pF

High accuracy: ±1%

Connector Type: Fixed stranded wire leads

Very comfortable to use and easy to read the total value

Long life time rocker switches

Compact size: 73.20×27.20×16.01(mm)

Durable resin enclosure

100 % lead (Pb)-free and RoHS compliant

APPLICATIONS

Tuning analog circuits and doing experiments. It's highly recommended for high frequency compensation network tuning, greater than 1MHz and up to 10MHz.

DESCRIPTION

This ATRCT101 is an accurate rocker switch resistor and capacitor box. The features listed above make it a very useful tool for tuning analog circuits where changing capacitance and resistance is needed. In electronic circuit experiments, ATRCT101 can be used to provide accurate resistance and capacitance values, reducing the time to replace resistors or capacitors, thus greatly improving the efficiency of tuning circuits. Its small size not only saves lab space, but also can be easily transported to another site. The anti-interference ability of this ATRCT101 is also better than other resistor and capacitor boxes in the market.

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SPECIFICATIONS

Table 1. Characteristic ($T_{Ambient}$=25°C)

Parameter	Conditions	Value	Unit/Note
Overall Dimensions		73.58×26.85×18.01	mm
Operating Temperature Range		–40 ~ 55	°C
Resistance			
Adjustment Range for Each Dial		1Ω ~500Ω 1kΩ ~ 500kΩ	
Tolerance	–40°C to 85°C	±1%	
Resolution		1	Ω
Residual Resistance		0.65±0.01	Ω
Capacitance			
Adjustment Range for Each Dial		10pF to 5nF 10nF to 5μF	
Tolerance	15°C to 35°C	±5%	
Resolution		10	pF
Residual Capacitance		≈6	pF

Note:

1. Test requirements: the operating parameters of conducting bridge are 1Hz, 1V, and 100Ω.

2. The temperature requirement at test is 25°C.

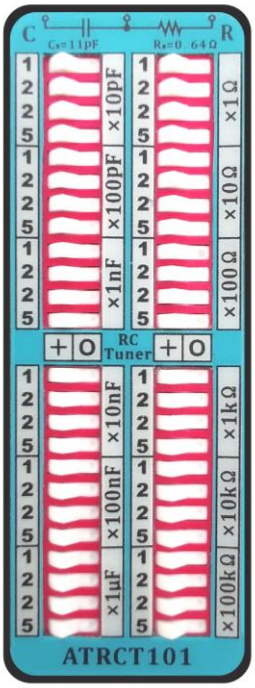


Figure 3. No Output Status

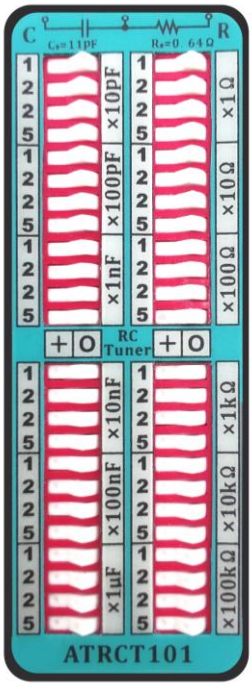


Figure 4. Full Output Status

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STATISTIC

1. Capacitance statistics: Capacitor output port. From the highest non-zero value to the lowest level, add all the values in turn to the total value.

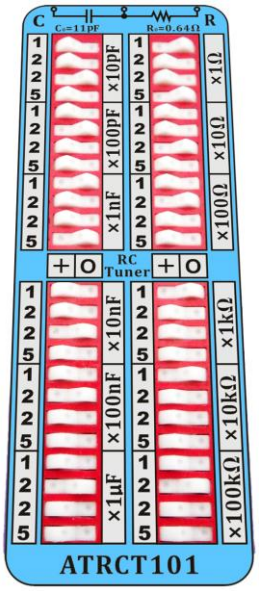


Figure 5. Example

2. Resistance statistics: Resistance output port. From the highest non-zero value to the lowest level, add all the values in turn to the total value.

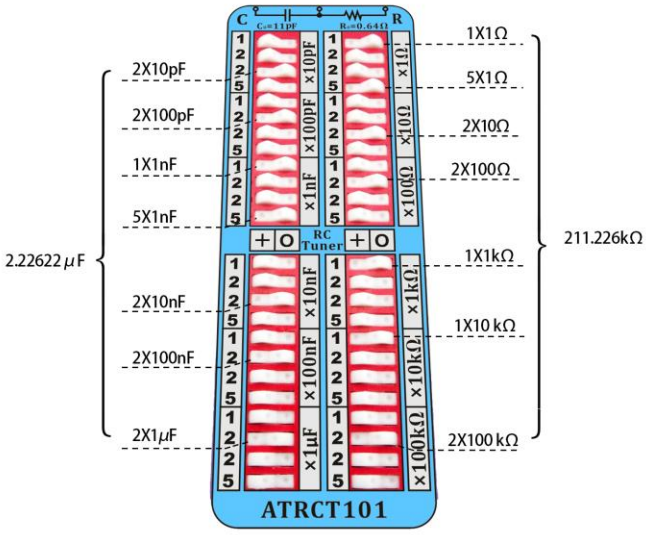


Figure 6. Calculation Demonstration



Figure 7. Side View of the ATRCT101



Figure 8. Stereoscopic View of the ATRCT101

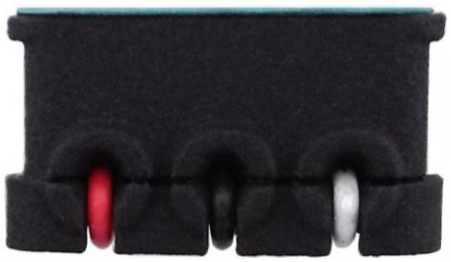


Figure 9. Front View of the ATRCT101

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MECHANICAL DIMENSIONS

The dimensions of the ATRCT101 is shown in Figure 11.

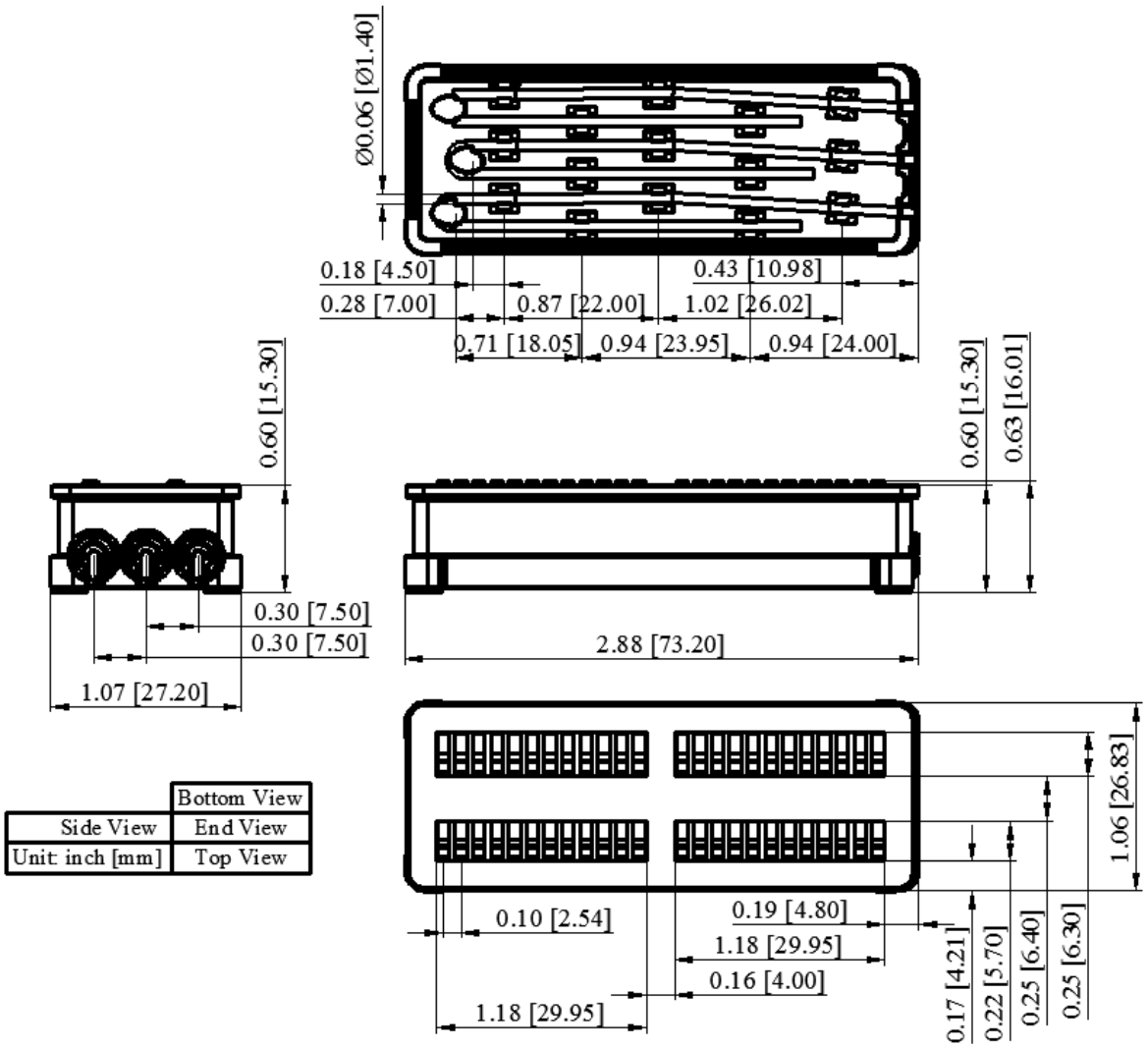


Figure 11. Dimensions of the ATRCT101

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