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## Schematic for X2Y capacitance measurement

## 1) Introduction

The X2Y component is a four terminal device including two capacitors A and B, with the same nominal value. The capacitors A and B share a common electrode that connects the terminal G1 to the terminal G2. G1 and G2 are usually connected to 'ground' (actually, the 0 volt reference).



The capacitance value that is coded in the part number represents the nominal value of A (or of B). Therefore, if the X2Y is connected per the above 'Circuit 1', we have one capacitor between each line and 'ground' (0 volt). If it is connected per the above 'Circuit 2', the total capacitance value is twice the value of A (or twice the value of B).

## 2) Schematic for Capacitance measurement

The capacitance value is measured between A and G (i.e. G1 or G2 since they are connected) or/and between B and G. The measurement frequency is 1 KHz if C > 1nF, and 1 MHz if C  $\leq$  1nF.



