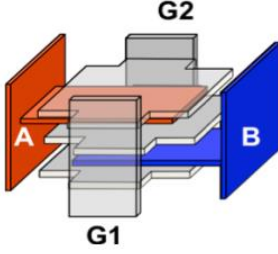
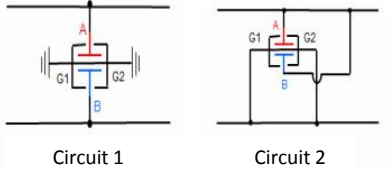


Schematic for X2Y Capacitance Measurement

1) Introduction

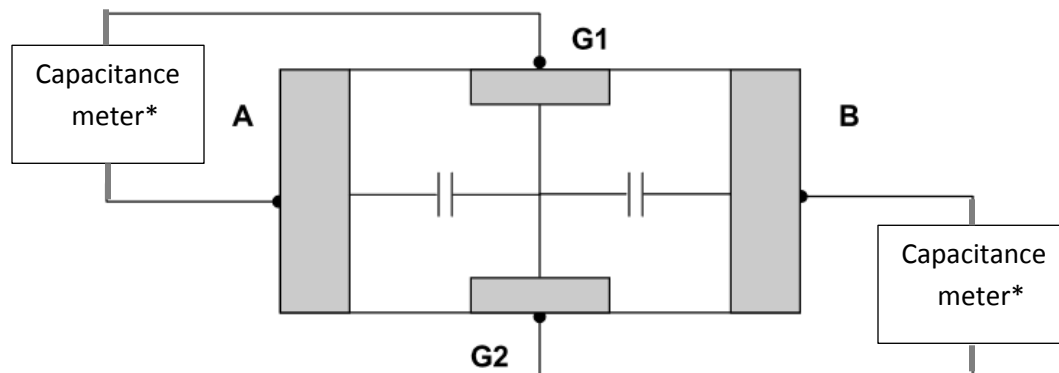
The X2Y component is a four terminal device including two capacitors A and B, with the same nominal value. The capacitors A and B share a common electrode that connects the terminal G1 to the terminal G2. G1 and G2 are usually connected to 'ground' (actually, the 0 volt reference).

		
Four Terminal Connections	Ultra-low Inductance, balanced electrode structure	Examples of Circuit schematic

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). Since these capacitors are in series, the capacitance measured across A-B in Circuit 1 will be half of the capacitance value from the part number. 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 $C > 1\text{nF}$, and 1 MHz if $C \leq 1\text{nF}$.



*A to G1 or B to G2 is the capacitance specified in the part number.