

Multimeters



A multimeter

Is a device capable of measuring a variety of electrical quantities.



The display

Is a 3 ½ digit display capable of displaying numbers from -19.99 to +19.99



The Dial

Is used to select the quantity to be measured.



Ω – Ohms – Resistance

hFE – Amplification of a transistor

V – DC Volts

V \sim AC Volts

$^{\circ}\text{C}$ – Temperature

Hz – Hertz – Frequency

F – Farads – Capacitance

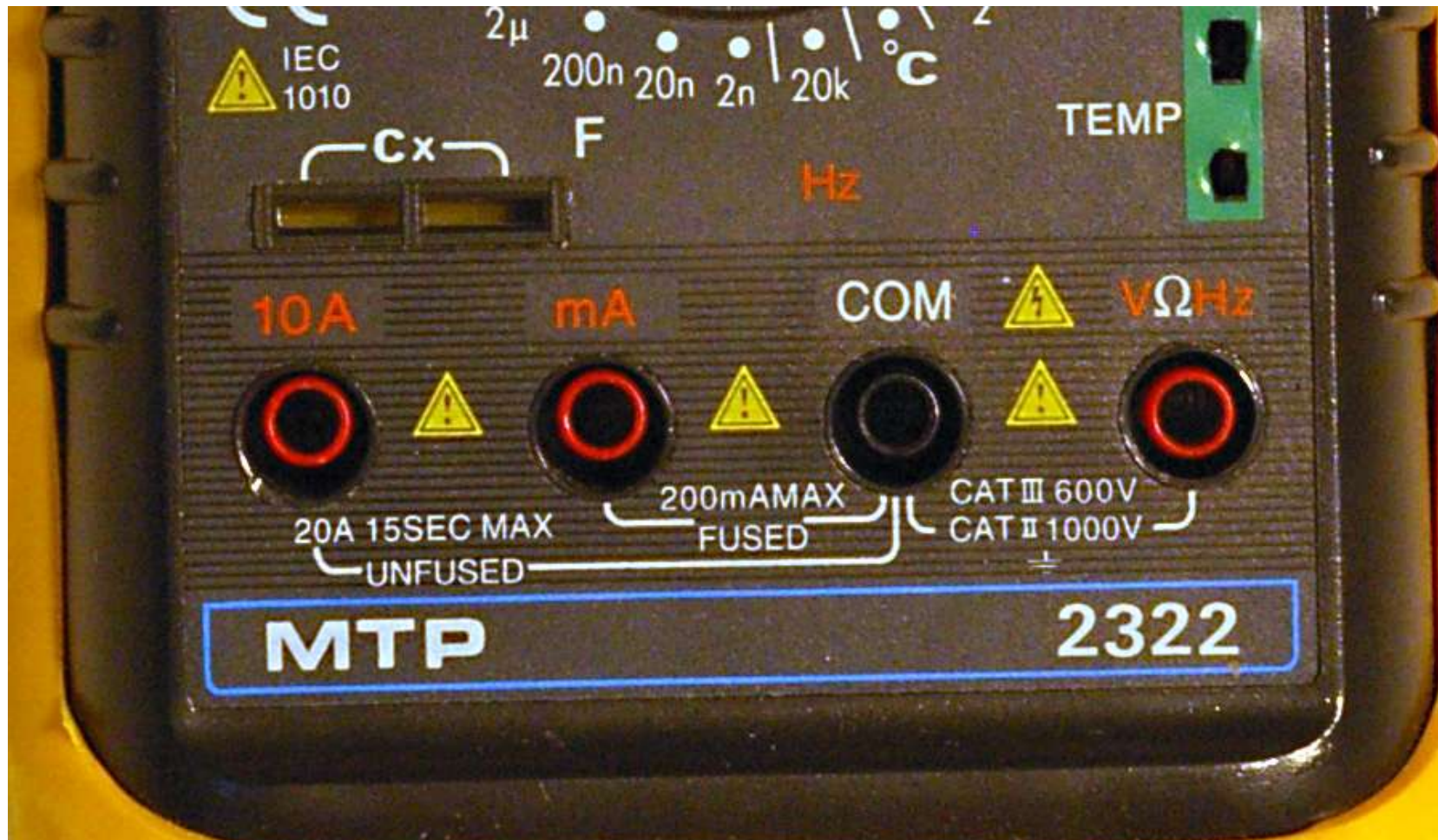
A \sim Amperes – AC Current

A – Amperes – DC Current

Beep – Continuity

Connections

For most measurements, the Black probe should be plugged into COM (common) and the Red probe should be plugged into V Ω Hz. To measure current, the 10A or mA connections are used. Capacitors can be plugged in at Cx. Temperature measurements require a special probe.



Temperature Probe



Resistance measurements

CAUTION: All power must be disconnected before using ohmmeter



Continuity Tester I

CAUTION: All power must be disconnected before using continuity tester



Continuity Tester 2

CAUTION: All power must be disconnected before using continuity tester



DC Voltage measurement



AC Voltage measurement



Transistor Testing



AC current measurements

CAUTION



DC current measurements

CAUTION

