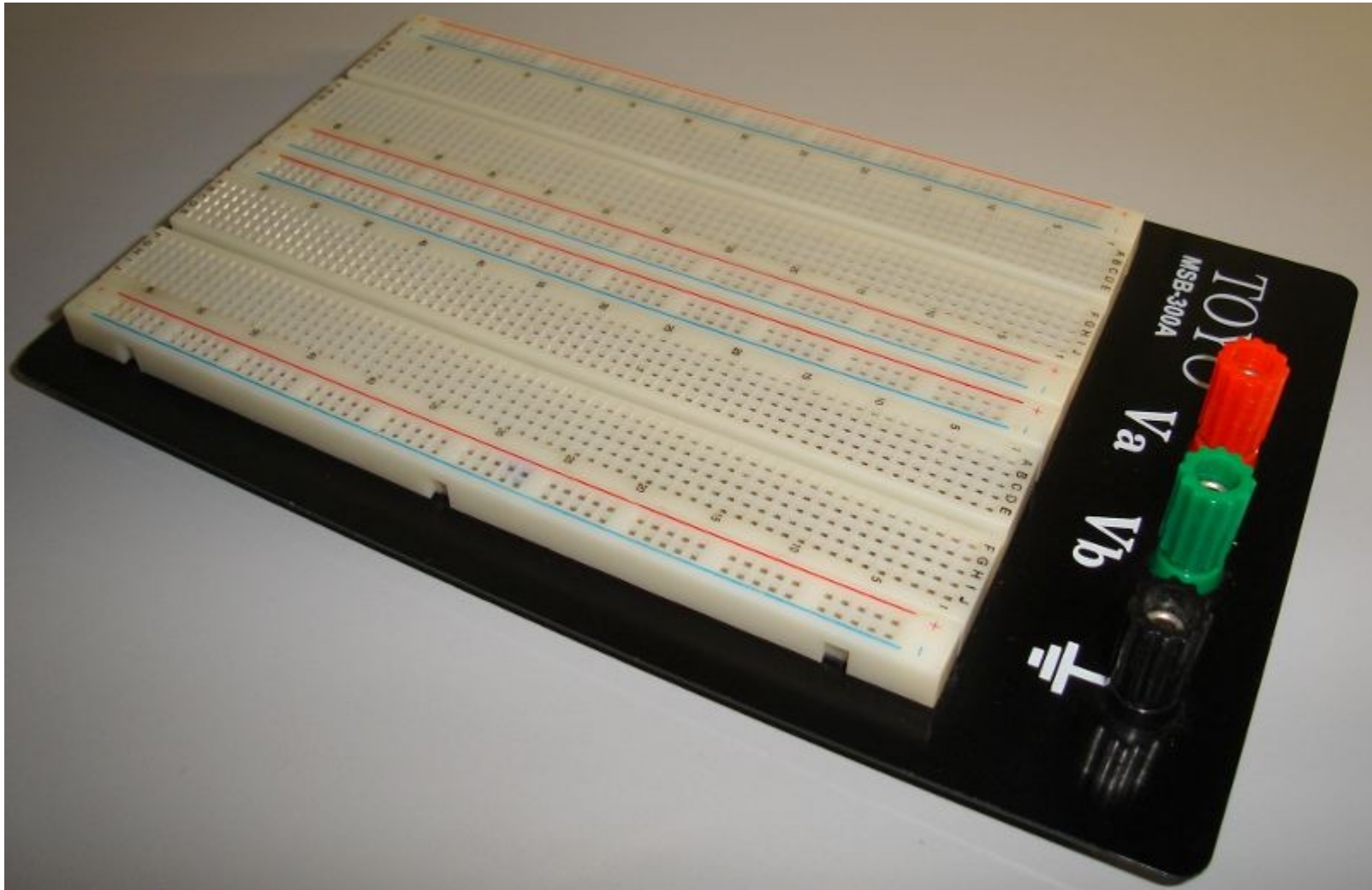


Matriz de Contato e Multímetro

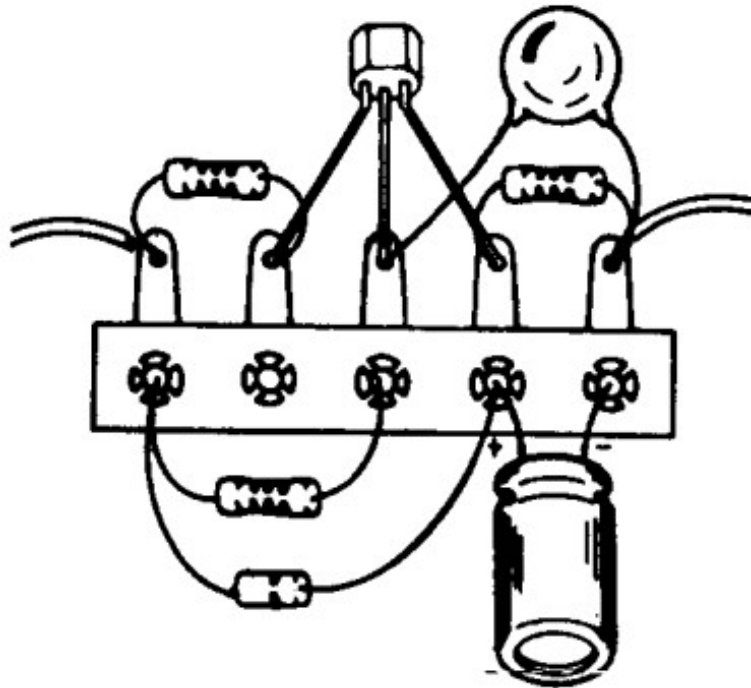
Prof. Muriel B. de Liz
Slides: Prof. Joabel Moia

Florianópolis, setembro de 2022

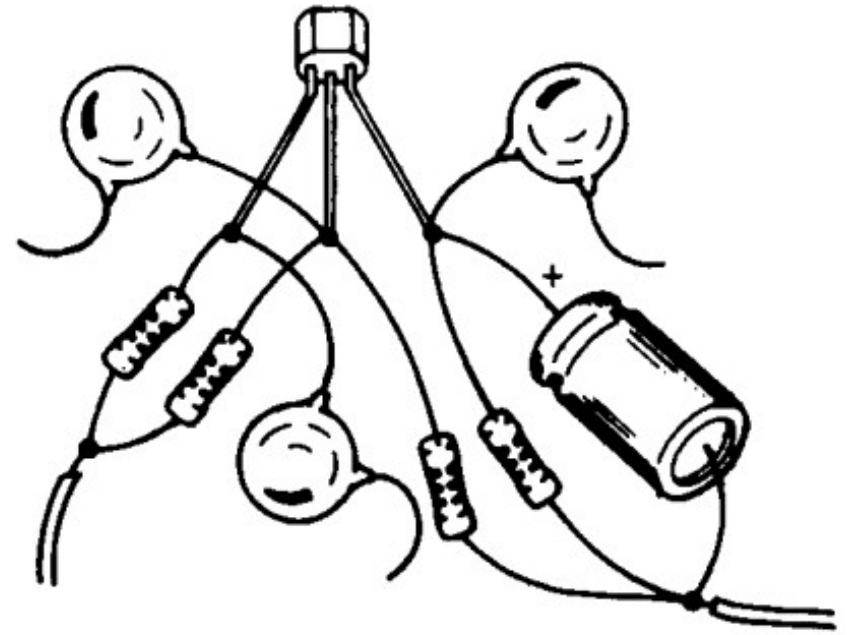
Matriz de Contato



Matriz de Contato - Função



**MONTAGEM EXPERIMENTAL EM
PONTE DE TERMINAIS**

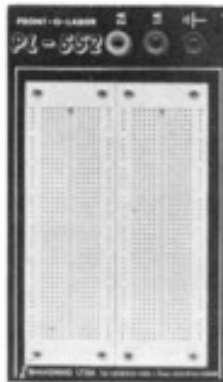


**MONTAGEM EXPERIMENTAL
"PENDURADA"(ARANHA)**

Matriz de Contato



INSTITUTO FEDERAL
SANTA CATARINA



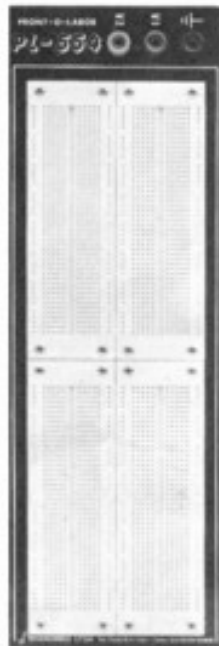
PL-552



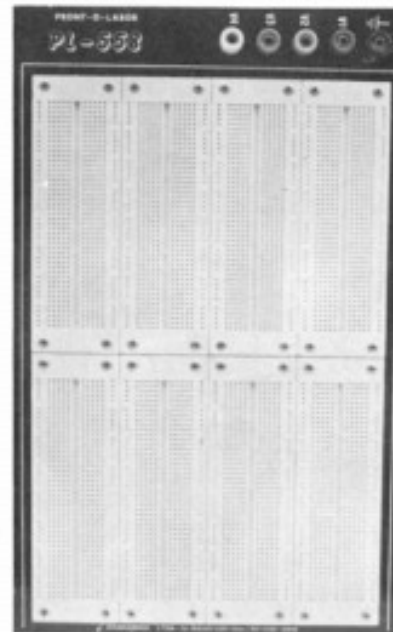
PL-551



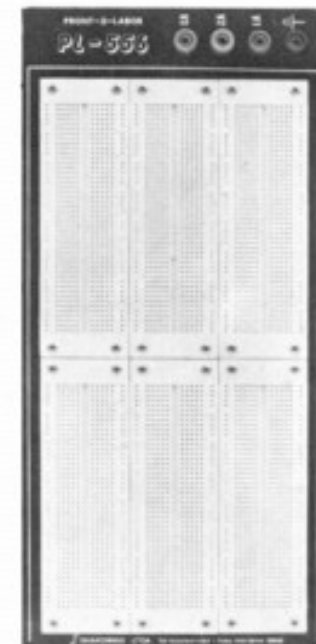
PL-553



PL-554

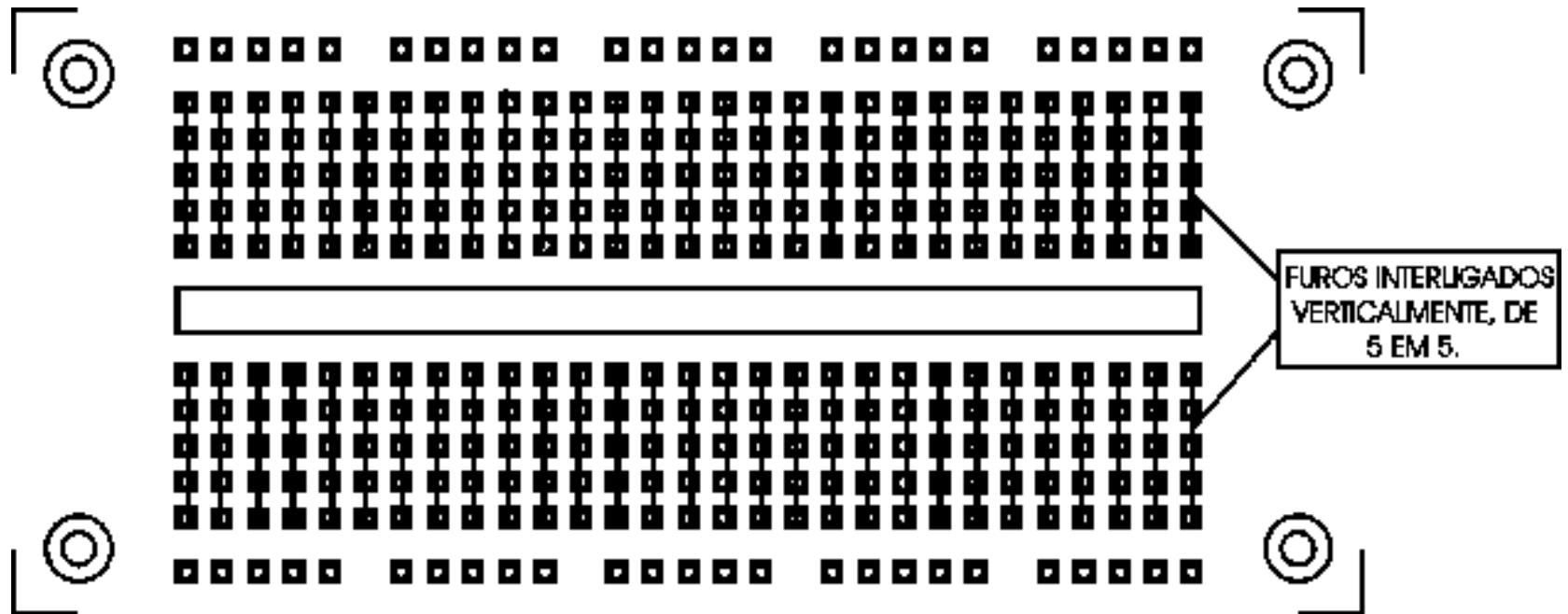


PL-558

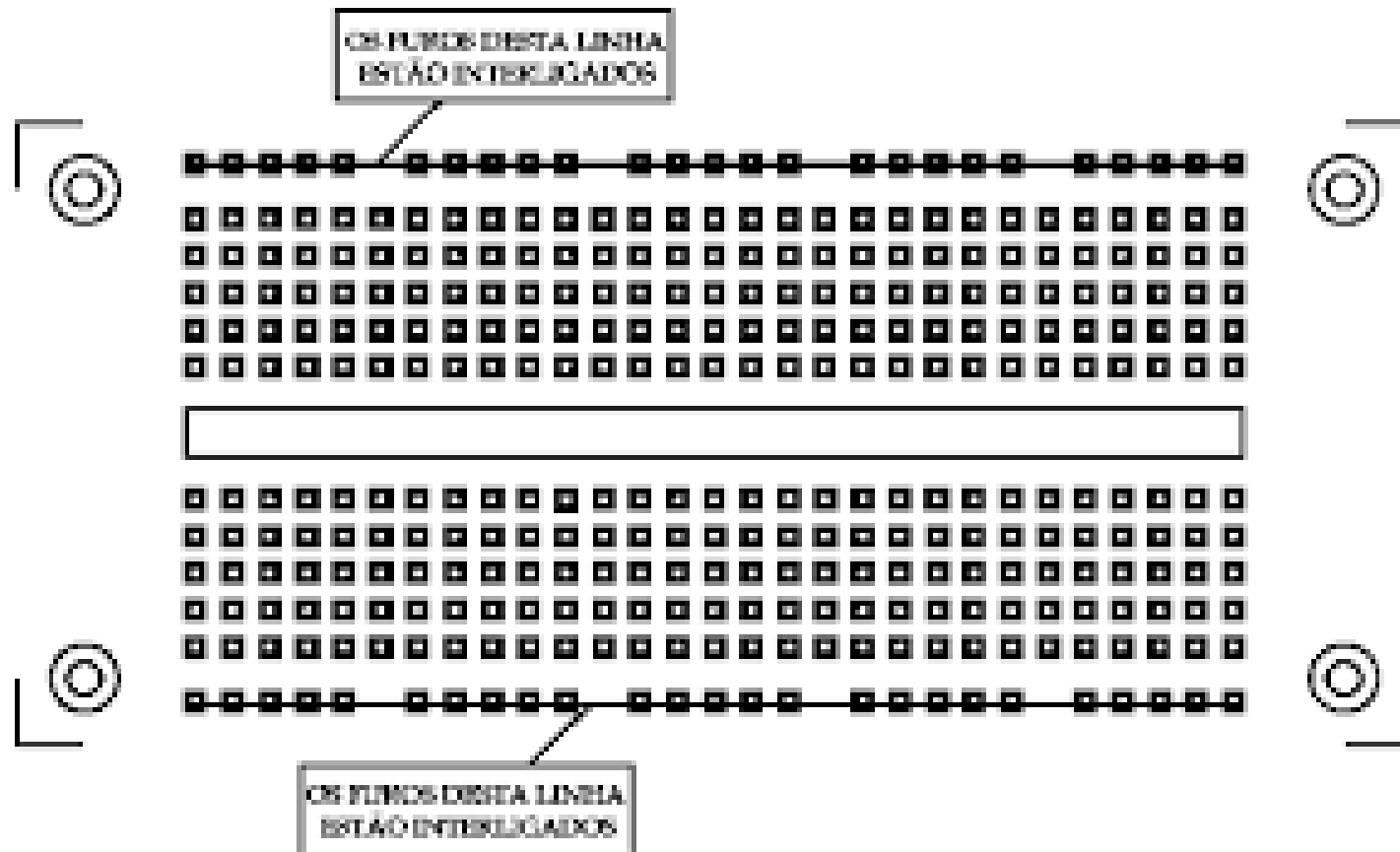


PL-556

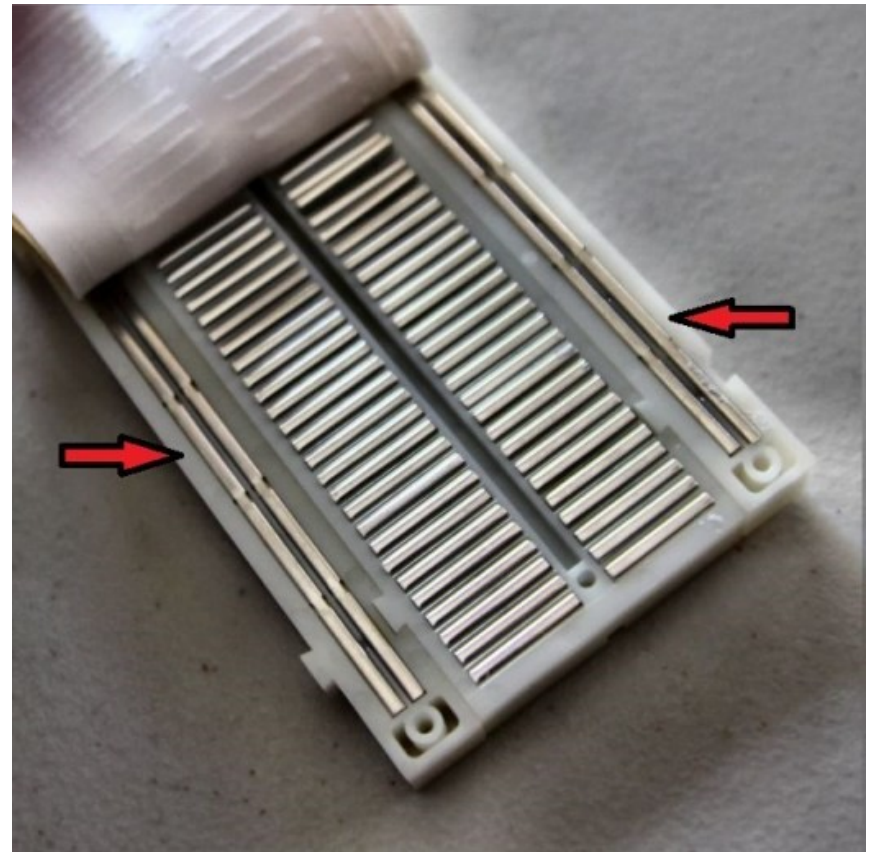
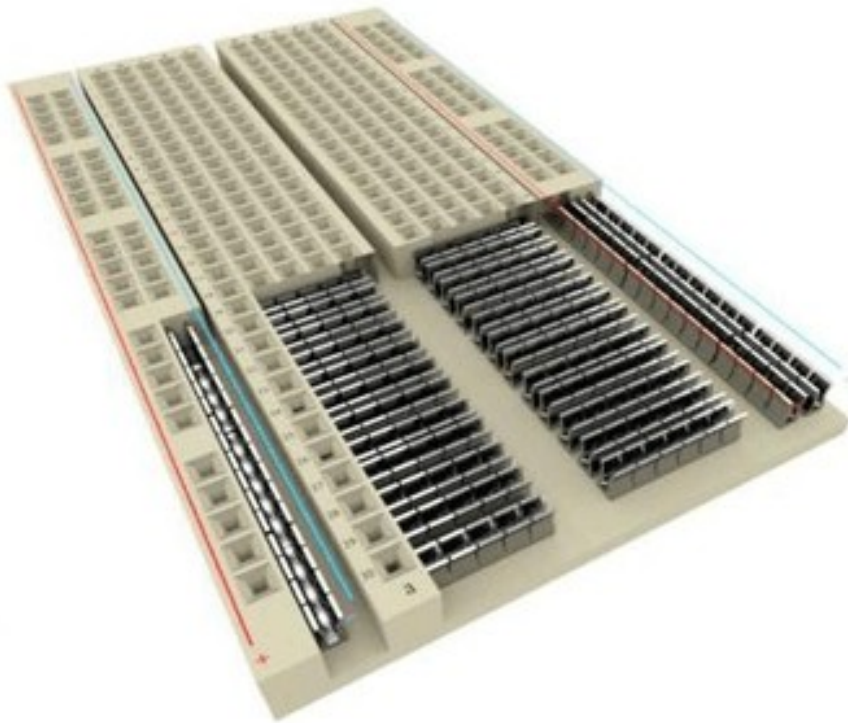
Funcionamento



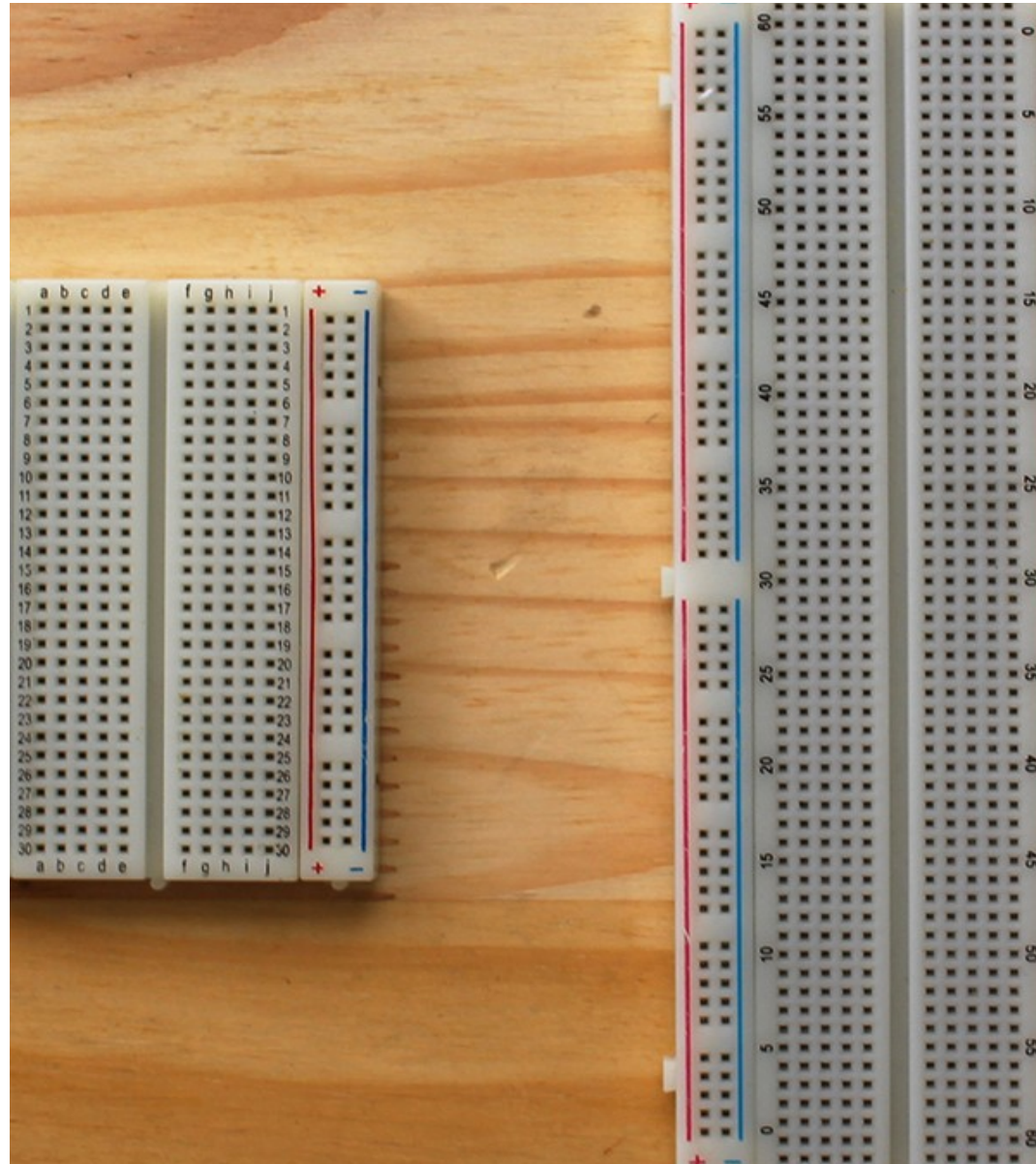
Funcionamento



Funcionamento

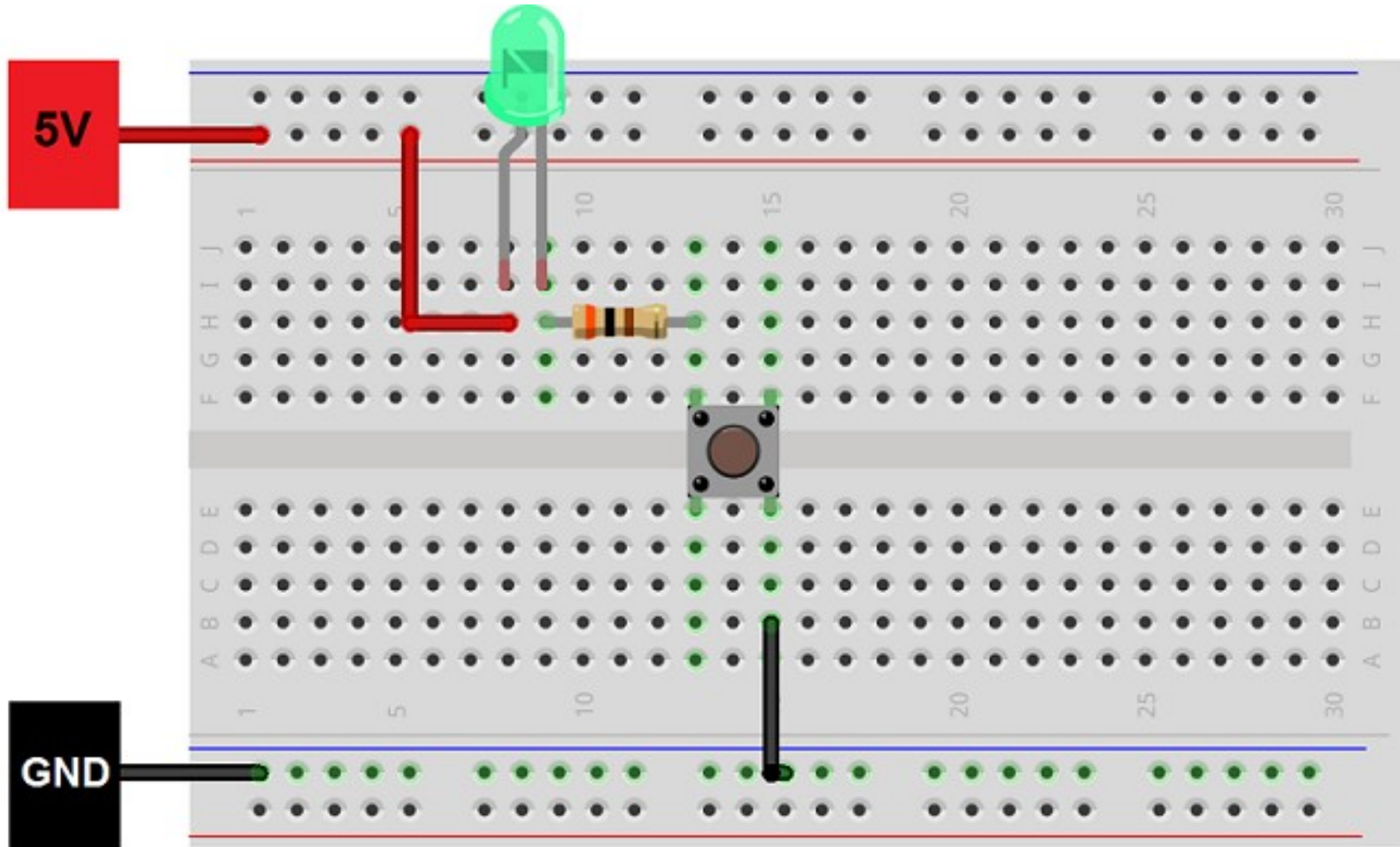


Funcionamento



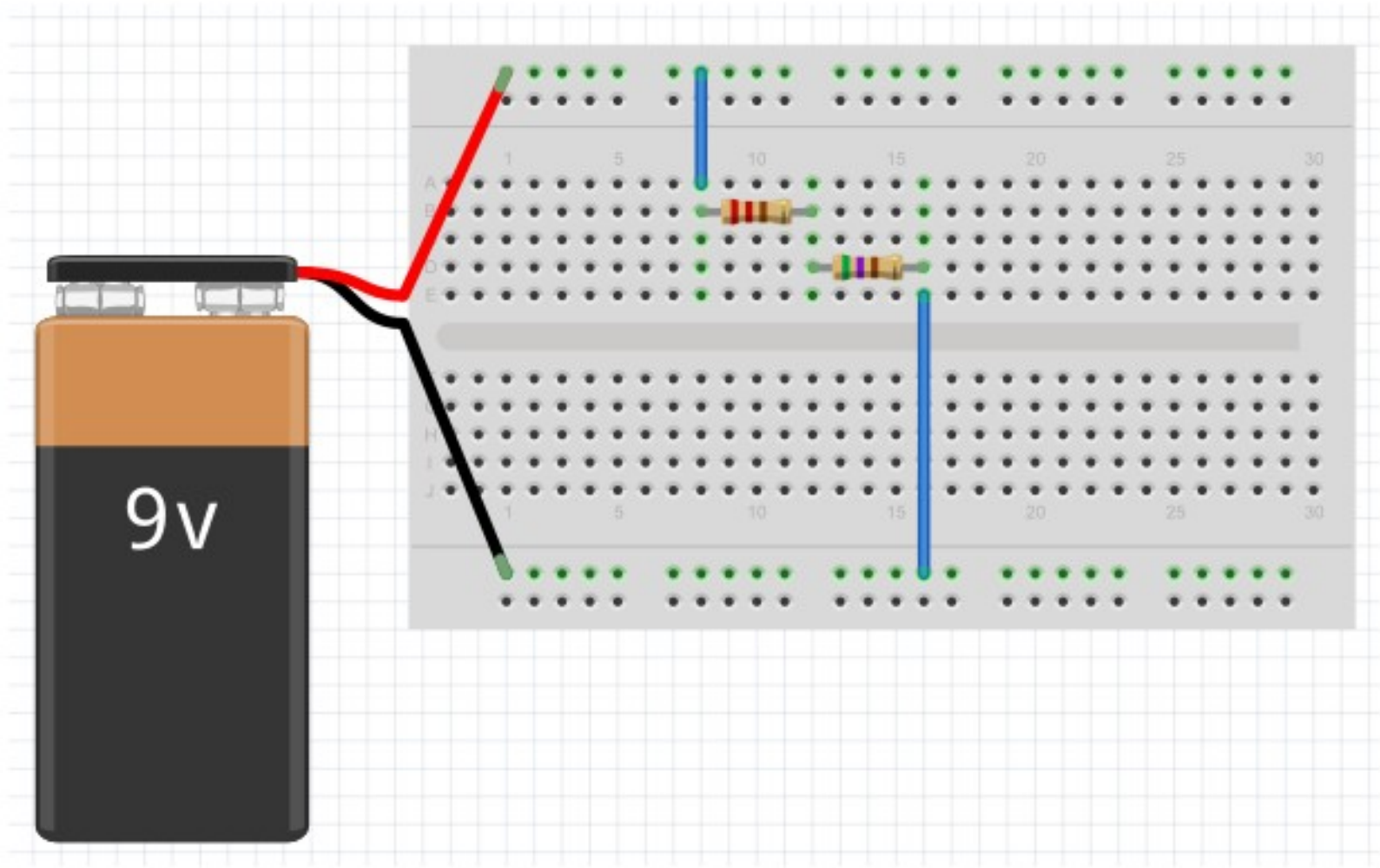
Matriz de Contato

Exemplo:

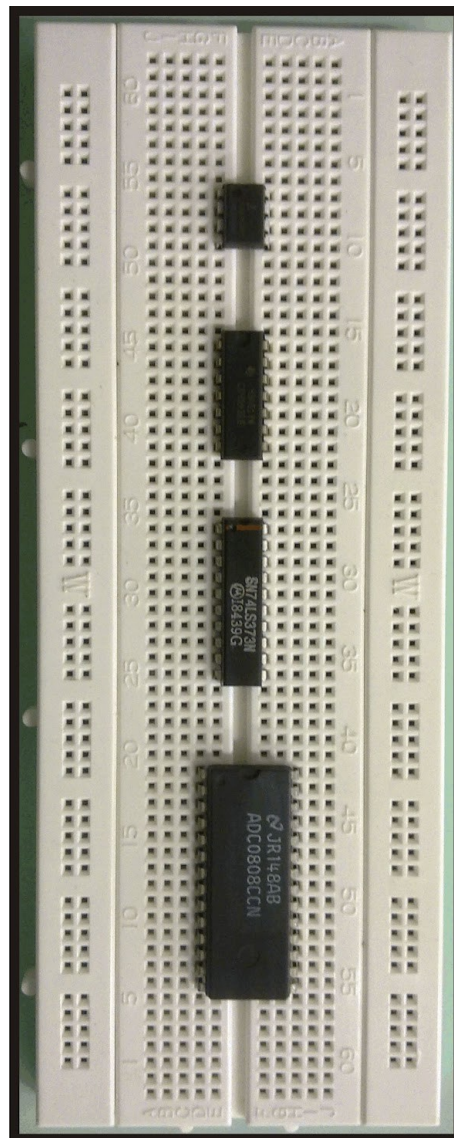


Matriz de Contato

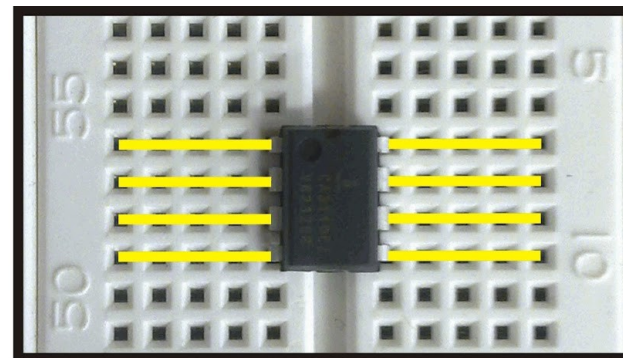
Exemplo:



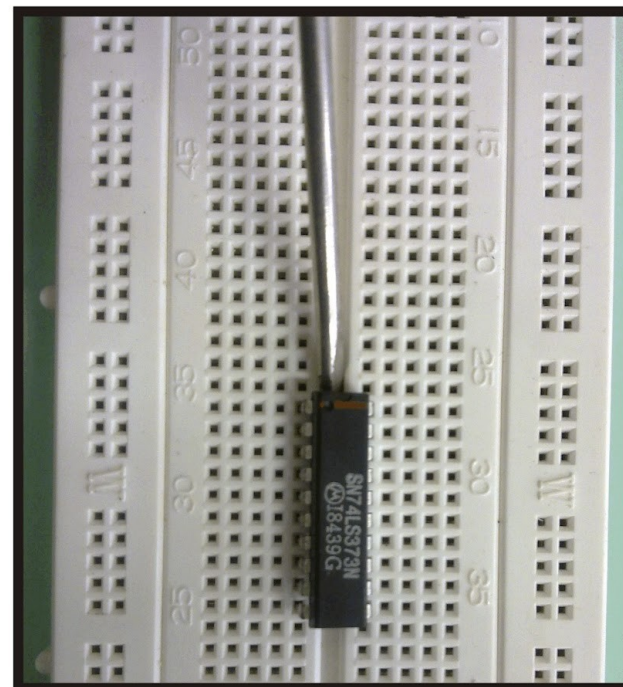
Funcionamento



Circuitos Integrados Posicionados
na Matriz de Contatos

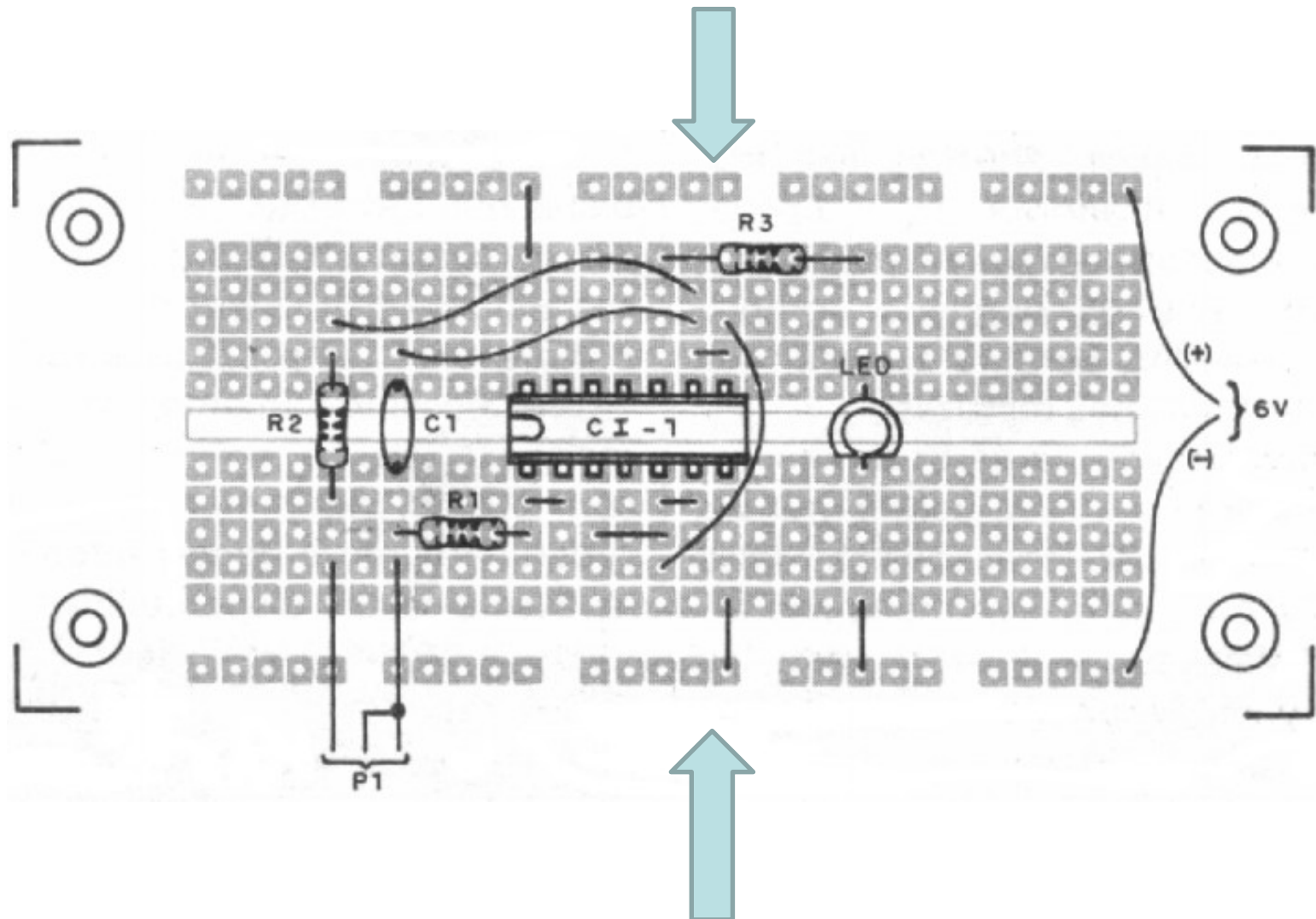


Detalhe de pinos interligados para uma
montagem com Circuito Integrado



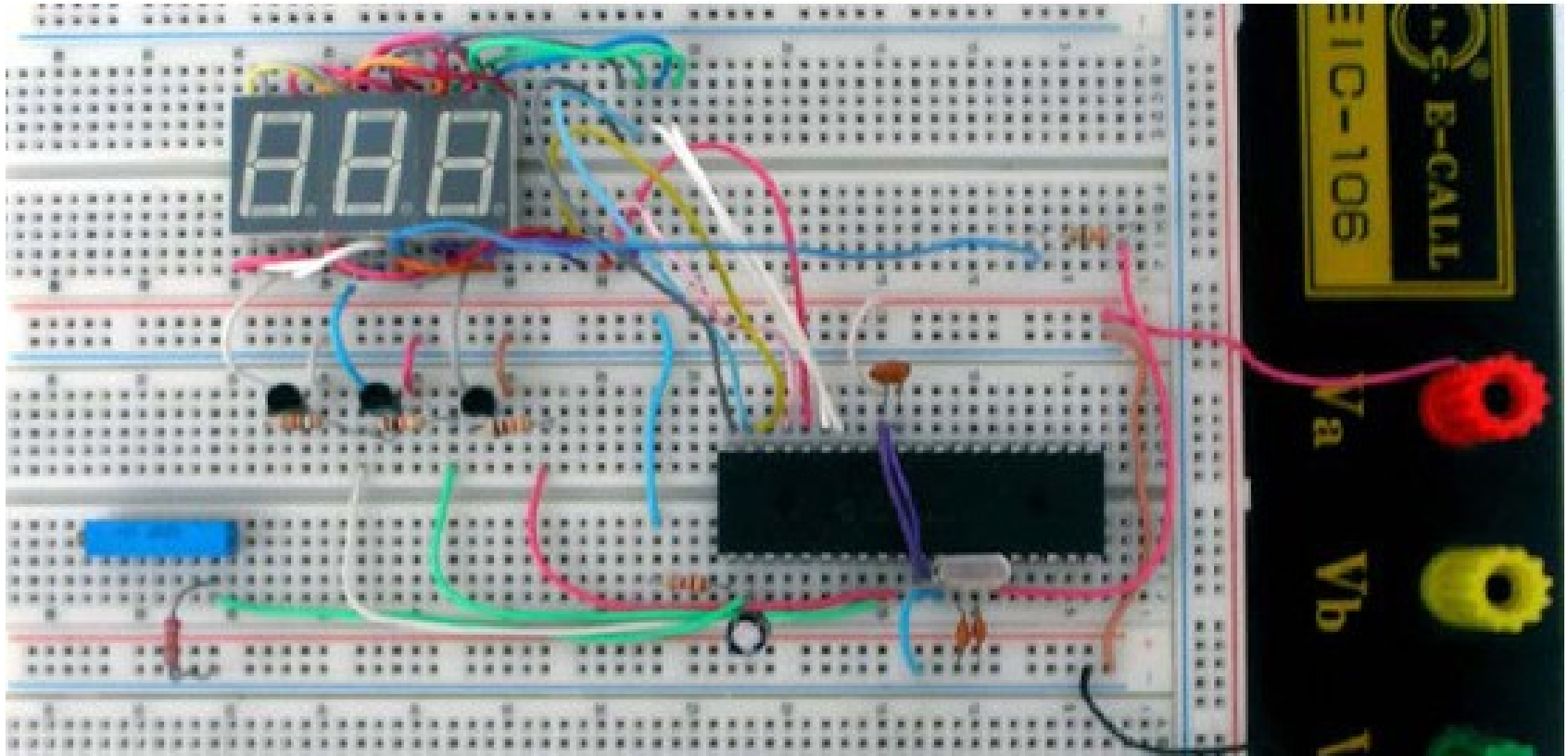
Detalhe de como se deve retirar um
Circuito Integrado da Matriz de Contatos

Matriz de Contato



Negativo (Barramento)

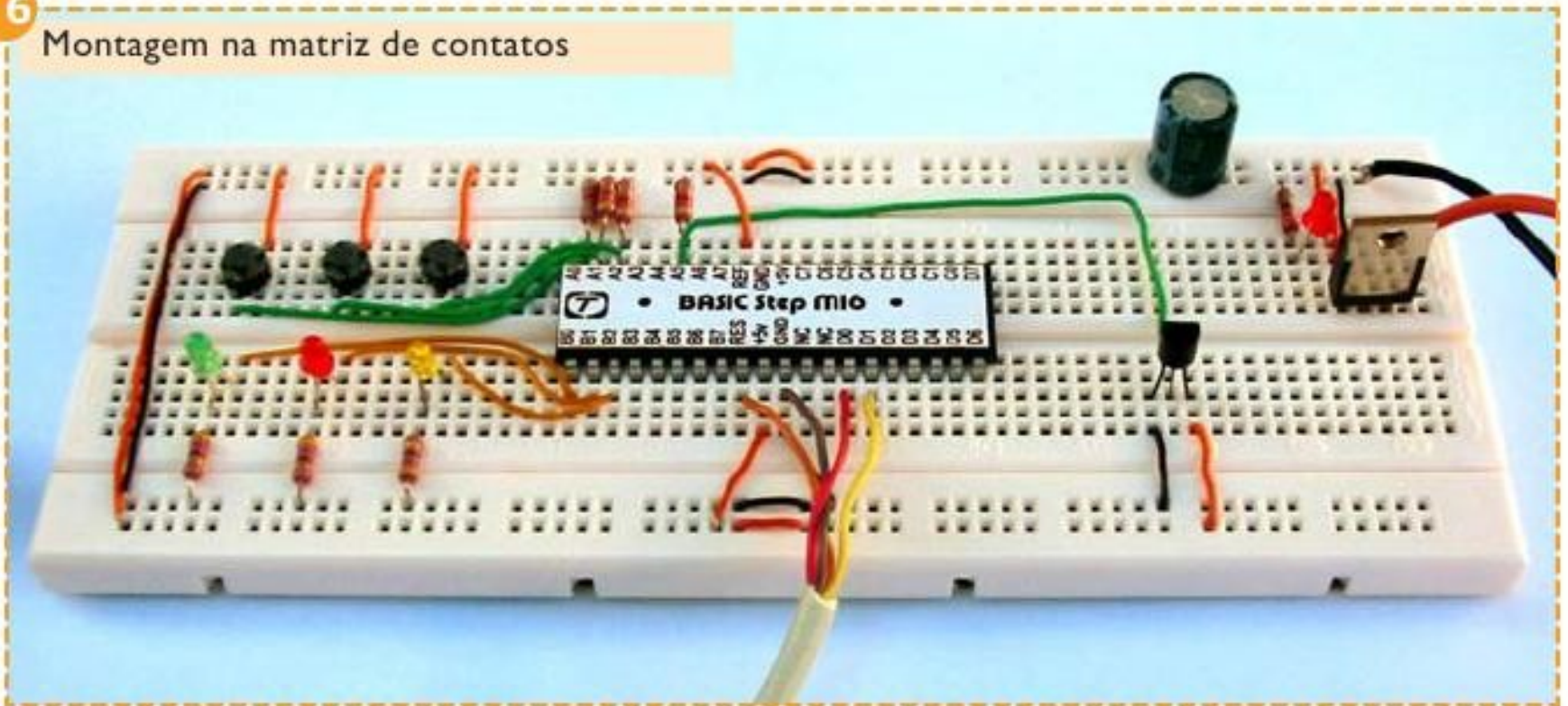
Matriz de Contato



Montagem boa

6

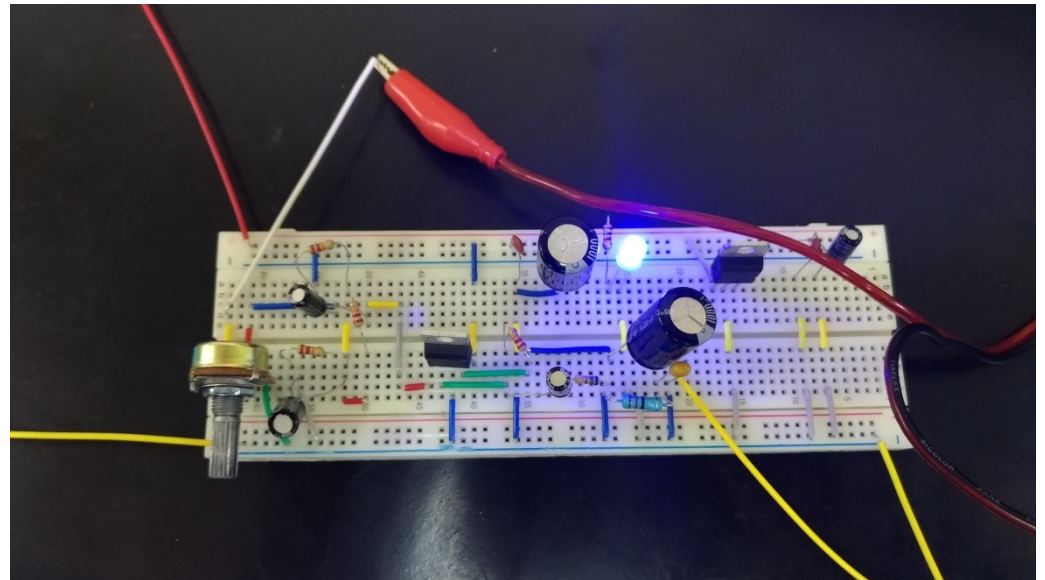
Montagem na matriz de contatos



Matriz de Contato

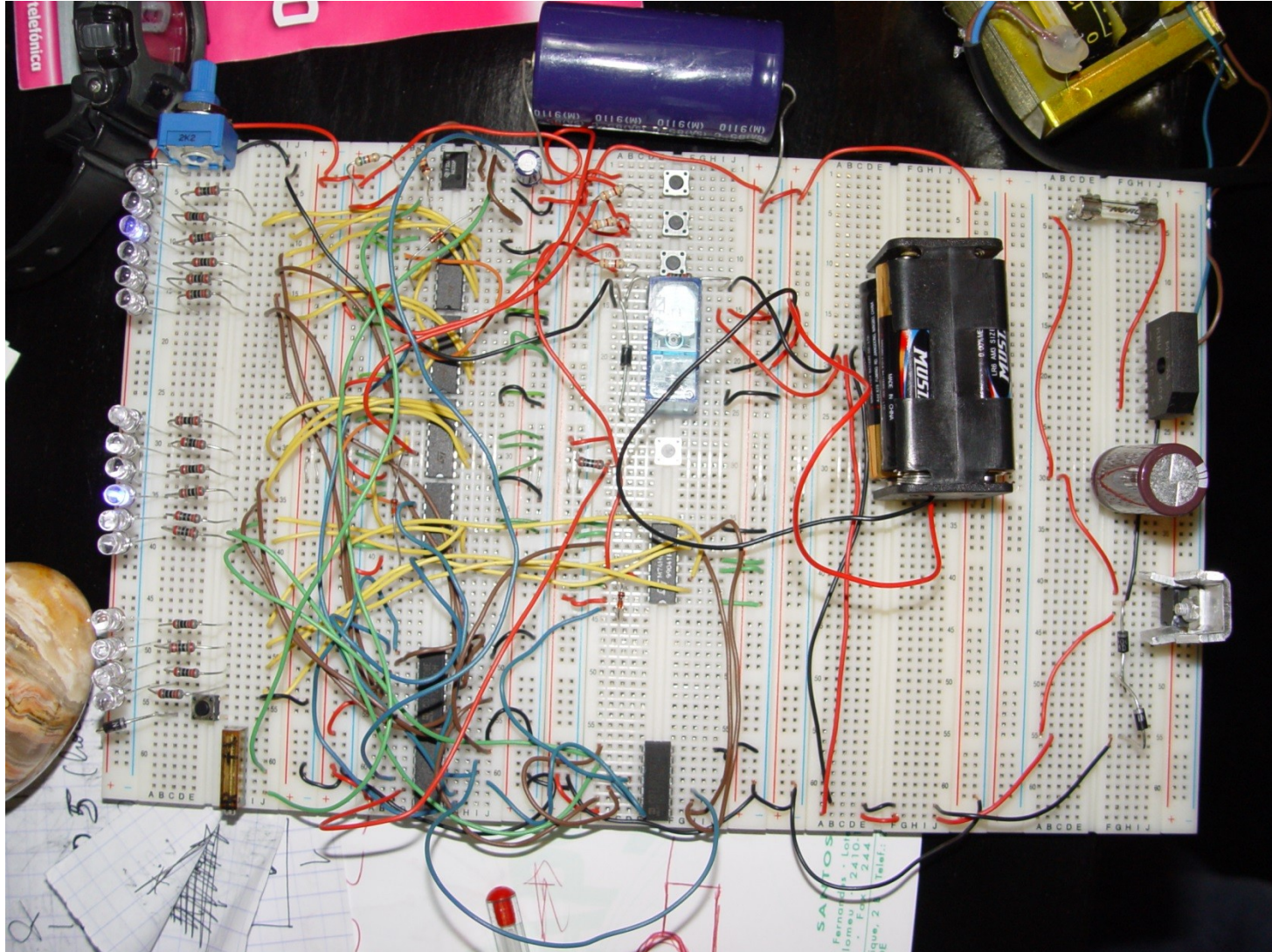
Montagem boa

Montagem Matriz de Contato
(Protoboard) semestre 2018-2

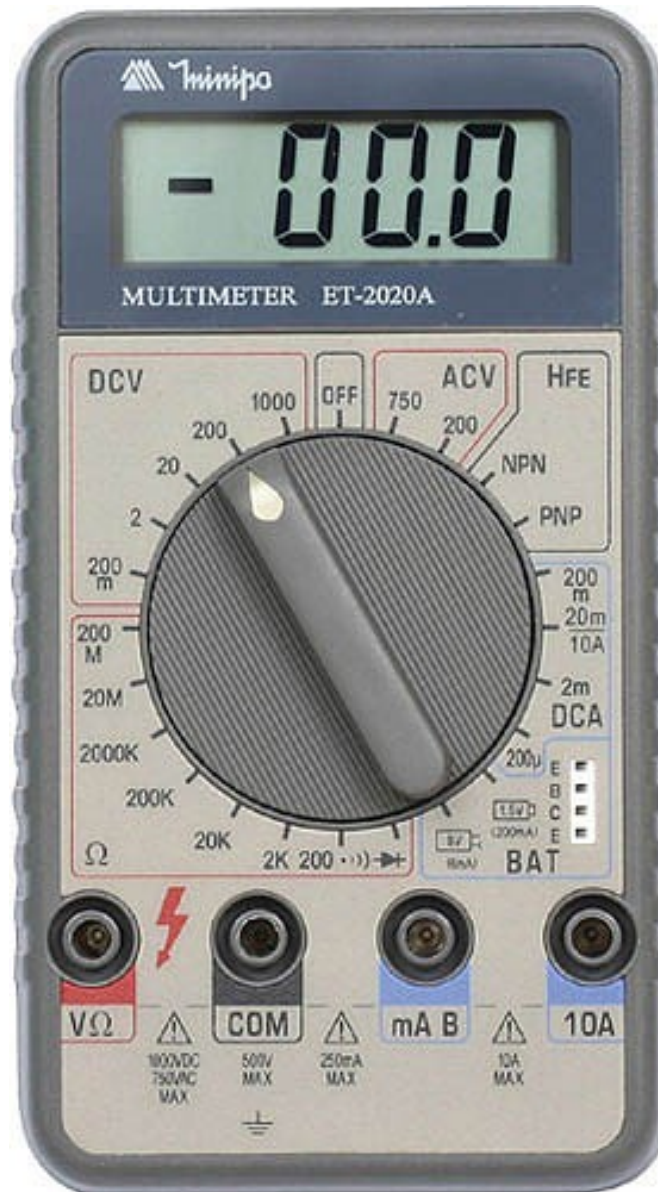


Matriz de Contato

Montagem ruim



Multímetro digital



Multímetro Digital

- Marcas consolidadas no mercado:
 - Minipa
 - Fluke
 - Agilent
 - Tenma
 - Icel

www.eleto-parts.com.br – R. Fulvio Aducci, 855 - Estreito, Florianópolis – SC
<http://www.farnellnewark.com.br> – São Paulo

Eletrônica Yama
R. Conselheiro Mafra, 426 Florianópolis - SC

MULTÍMETRO DIGITAL ET 2082 - MINIPA
R\$459,00

<http://www.casamirandaeletron.com.br/>



Multímetro Digital

Eleto Parts - Florianópolis

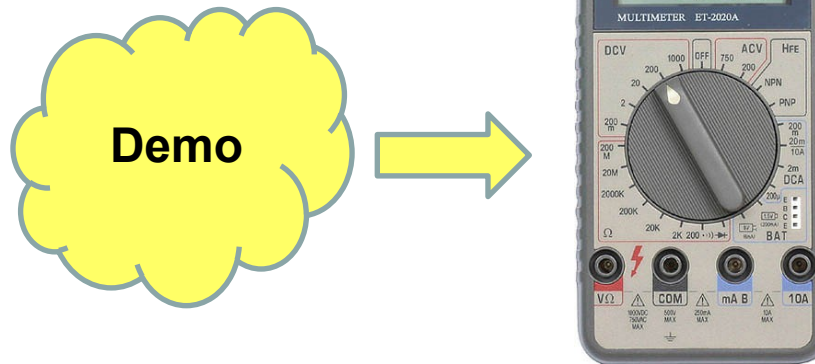


Fabricante: Smart
Modelo: DT-830
R\$ 22,90



Fabricante: Minipa
Modelo: ET-2507A
R\$ 699,00

Multímetro digital



Demo:

- Multímetro digital;
- Principais escalas;
- Conectores;
- Grandezas principais.

Multímetro digital

DCV

Escala de tensão contínua

Valores médios:

- Menor = 200 mV;
- Maior 1000 V.



Multímetro digital

ACV

Escala de tensão alternada

Valores eficazes:

- Menor = 200 V;
- Maior 750 V.



Multímetro digital

DCA

Escala de corrente contínua

Valores:

- Menor = 200 μA ;
- Maior 10 A.



Multímetro digital

Ω

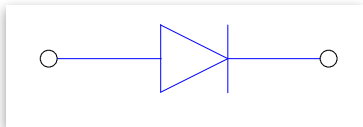
Escala de resistência

Valores:

- Menor = 200 Ω ;
- Maior 200 M Ω .



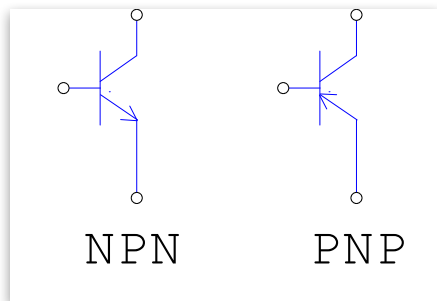
Multímetro digital



Teste de diodos



Multímetro digital

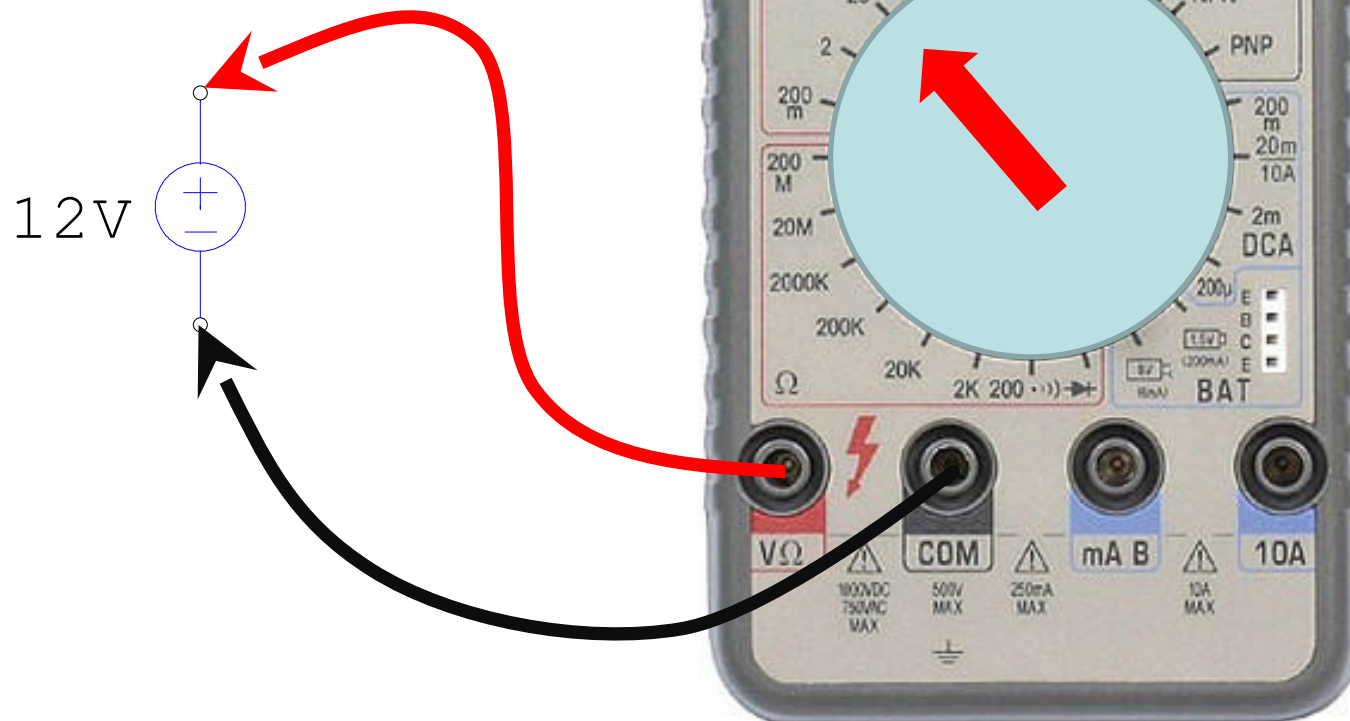


Teste de transistores



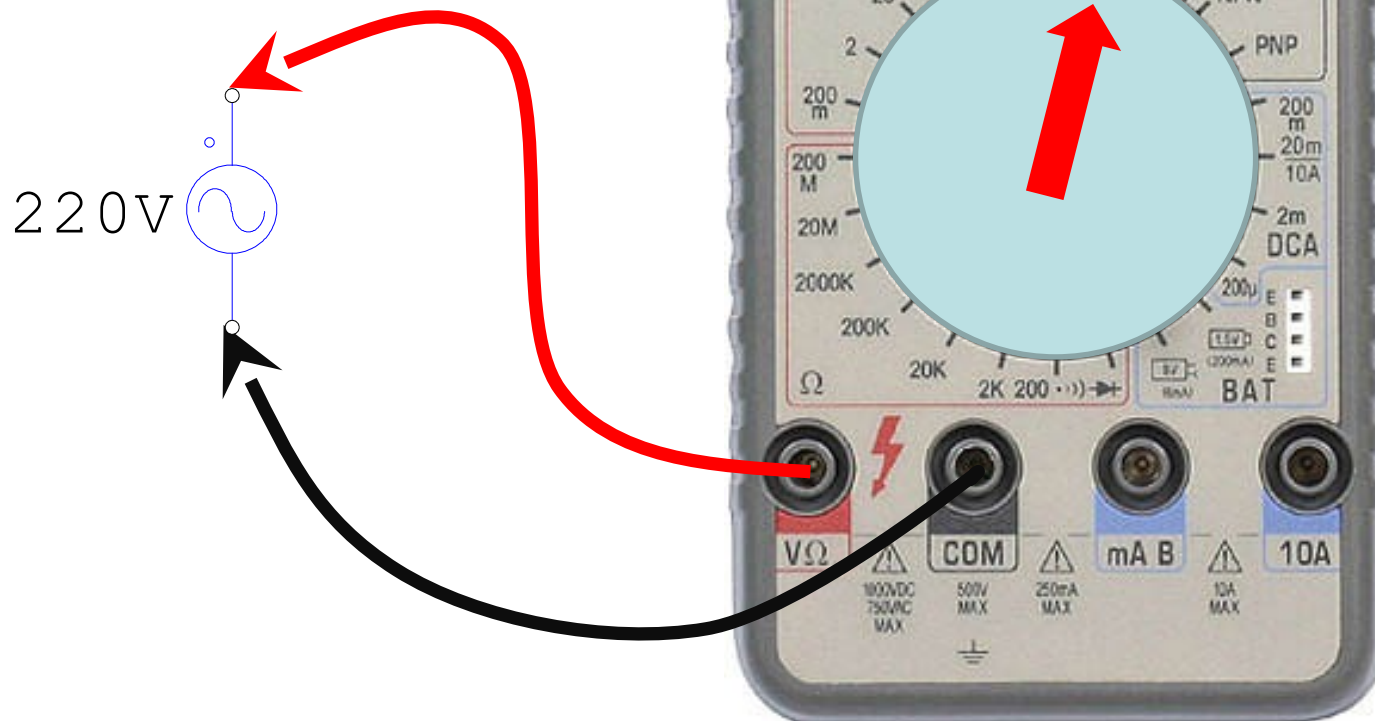
Multímetro digital

Medindo tensão contínua



Multímetro digital

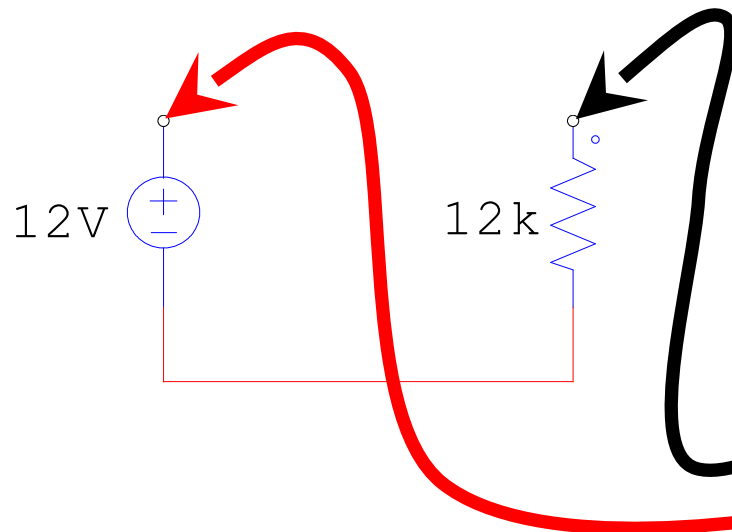
Medindo tensão alternada



Multímetro digital

Medindo corrente contínua

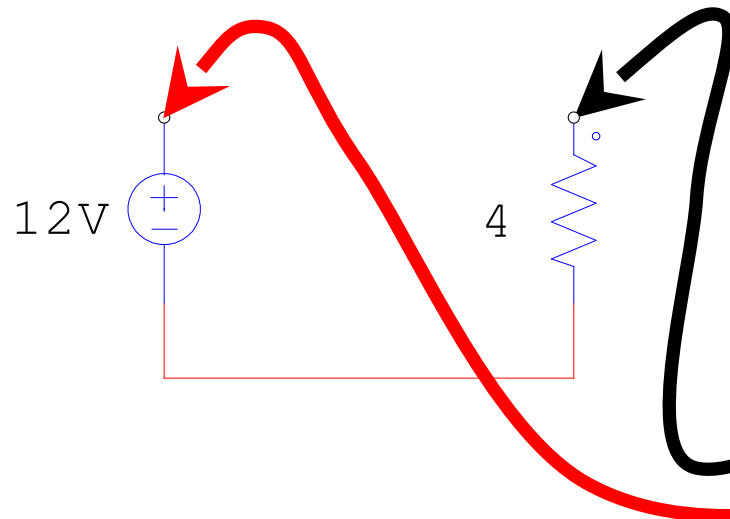
$$I < 2 \text{ mA}$$



Multímetro digital

Medindo corrente contínua

$$I > 0,2 \text{ A}$$



Multímetro digital

Medindo resistência





Seletor Automático da Medida:



U\$ 199,00 (Amazon)