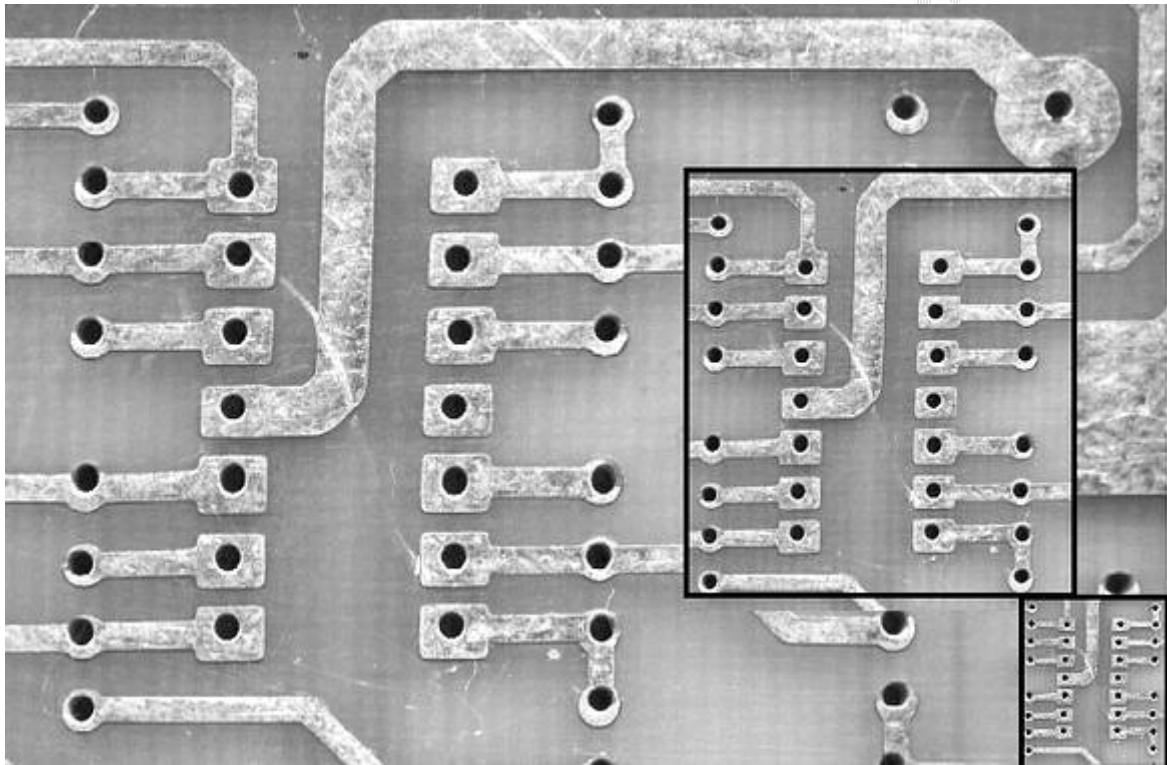


PROJETO DE CIRCUITO IMPRESSO

© Prof. Eng° Luiz Antonio Vargas Pinto
2008



Relatórios: Título
Objetivo
Circuito experimental
Dados obtidos
Análise
Ocorrências
Conclusões

Material:
Guarda-pó branco
Papel Sulfite A4 branco liso com margem
Borracha branca plástica
Régua 30 Cm
Esquadro 45°
Canetas Marca Texto
Lapiseira 0.5 ou 0.7mm 2B
Caneta Fine Liner ou Ultra fine preta
Flanela
Gabarito (opcional)
Soldador 30W (opcional)

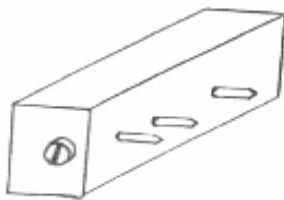
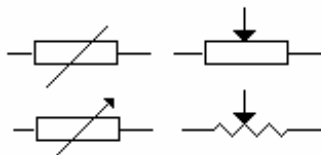
1. Resistores

Resistor Fixo

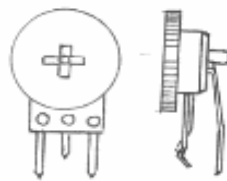
Carbono, filme metálico ou fio



Resistor Variável



Multivoltas

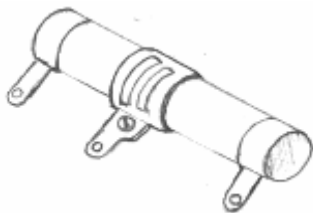
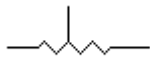


Trim Pot

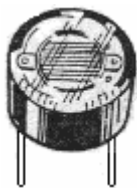


Potenciômetro

Com derivação



LDR



2. Indutores

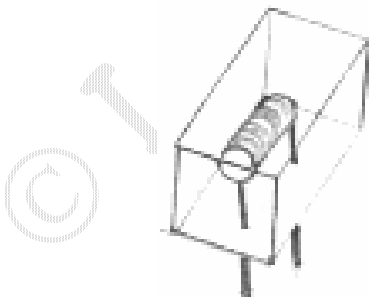


Bobinas

Bobinas de RF



Encapsulada



Toróide



3. Capacitores \equiv

Cerâmico

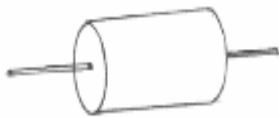
Capacidade medida em picoFarad ($\times 10^{-12}$ F)



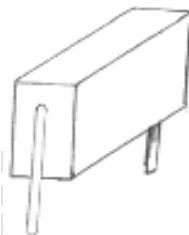
Poliéster

Capacidade medida em nanoFarad ($\times 10^{-9}$ F)

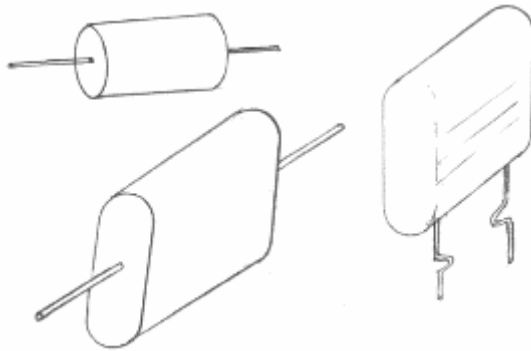
Styroflex



Schiko



Poliéster

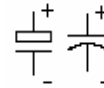


Tântalo [polarizado]



Eletrolítico [polarizado]

Capacidade medida em microFarad ($\times 10^{-6}$ F)

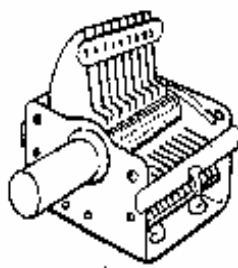


Radial

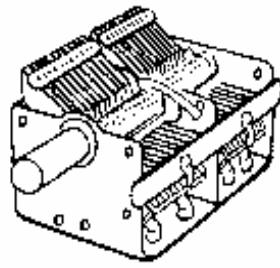


Axial

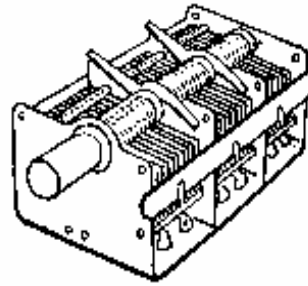
Capacitor Variável



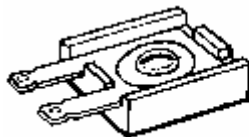
Com uma secção



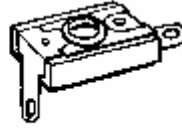
com duas secções



com três secções



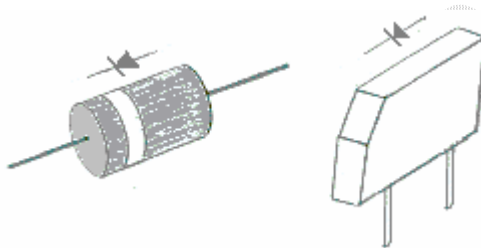
PADDER



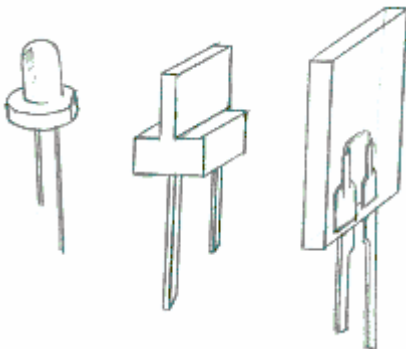
TRIMMER

4. Semicondutores

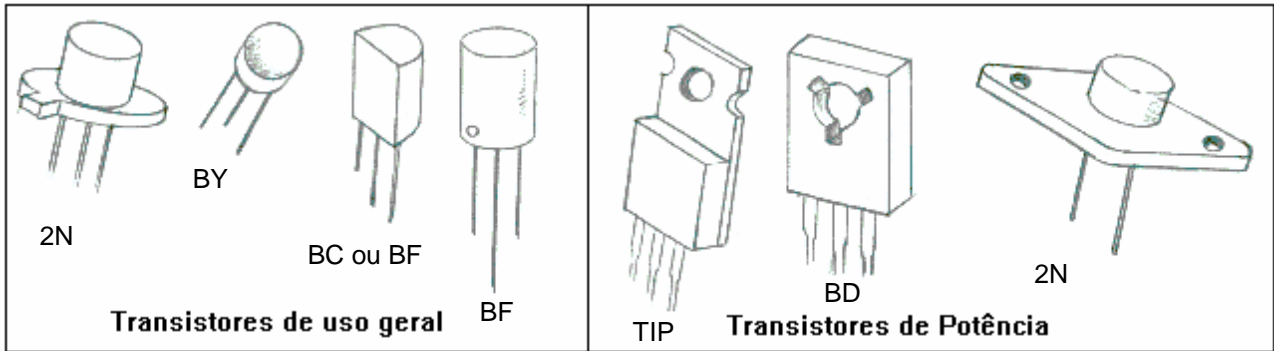
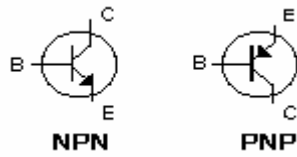
Diodo



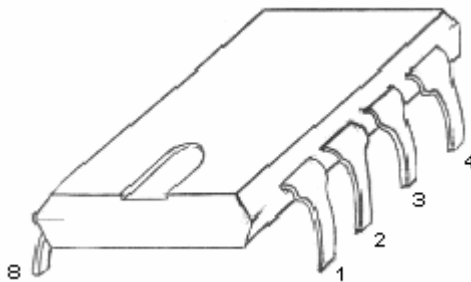
LED



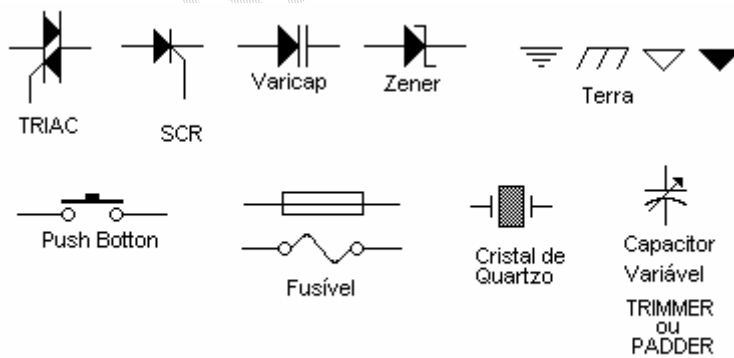
Transistor



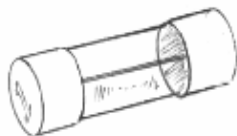
5. Circuito Integrado



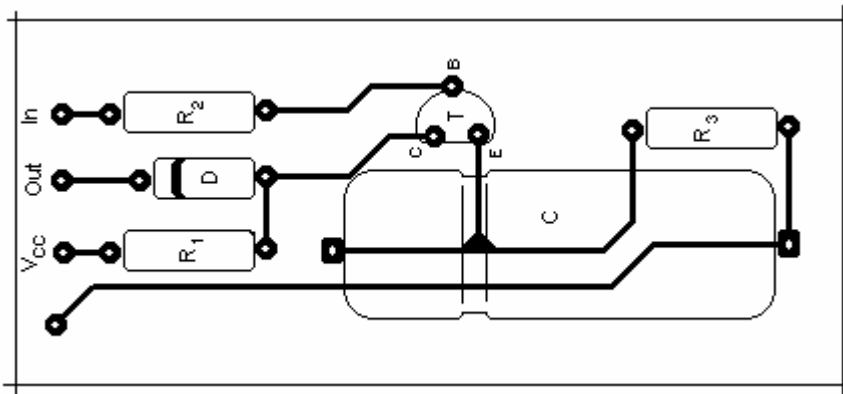
6. Mais alguns símbolos



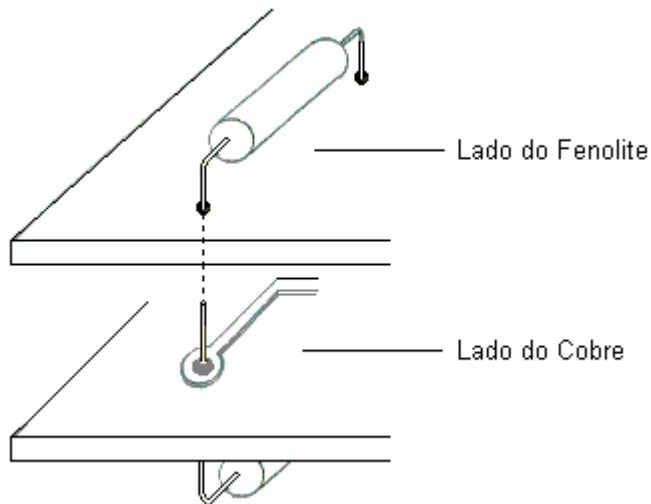
7. Fusível



PCI (*Placa de Circuito Impresso*)

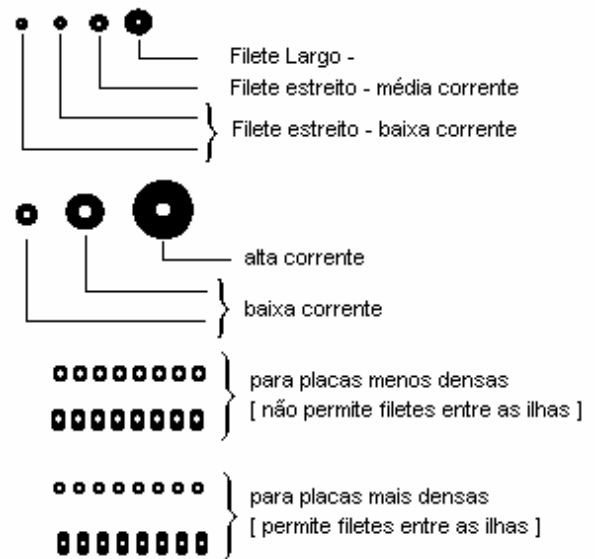


Soldagem



Considerações

Errado	Correto



Medidas

A utilização de algumas medidas tem aplicação em placas de pequeno e médio porte pois dificilmente se utilizaria algum programa de CAD para o desenvolvimento das mesmas exceto em empresas que trabalhem especificamente com esse serviço.

Alguns componentes tem medidas simples, as quais veremos a seguir: