`<documentation>`

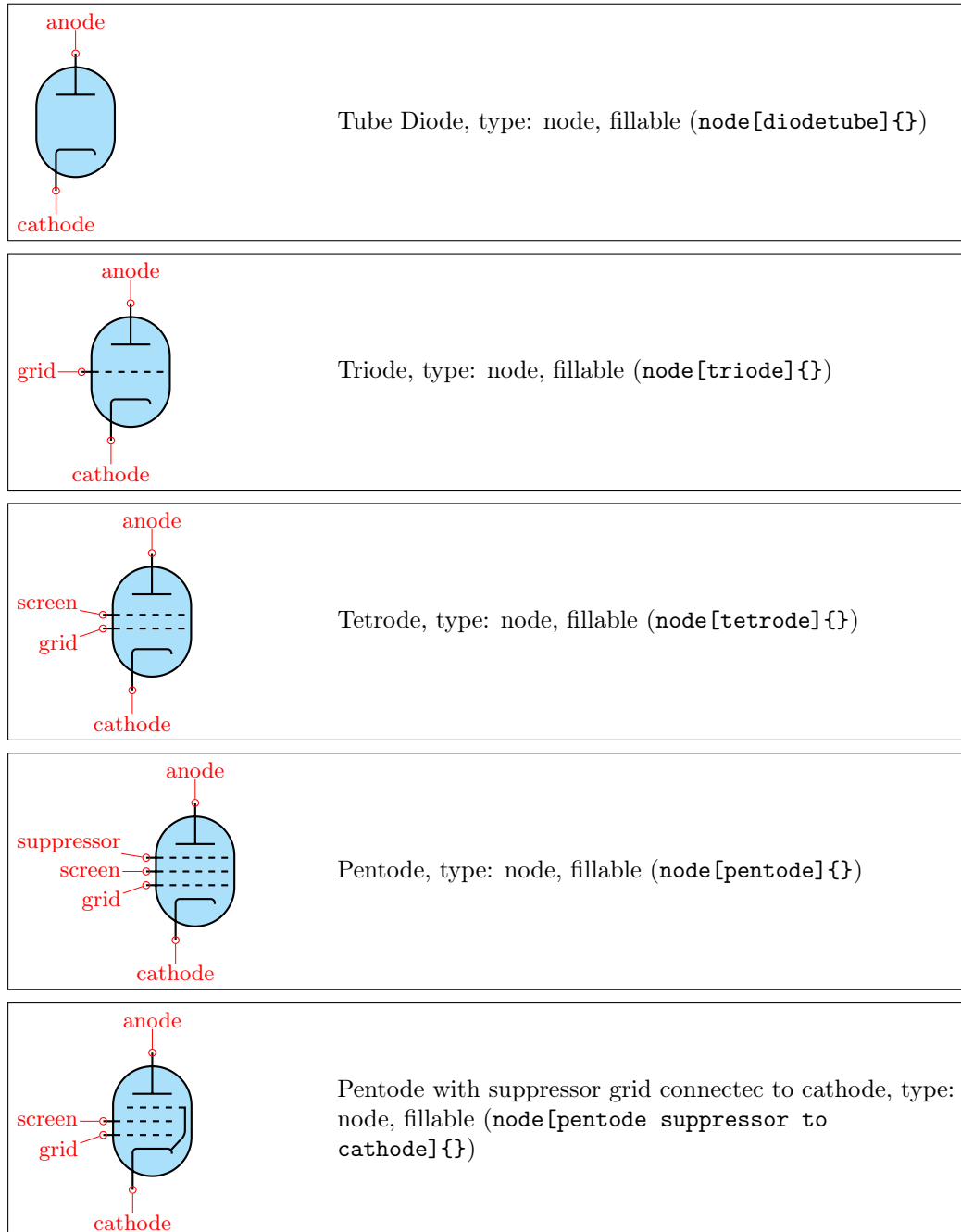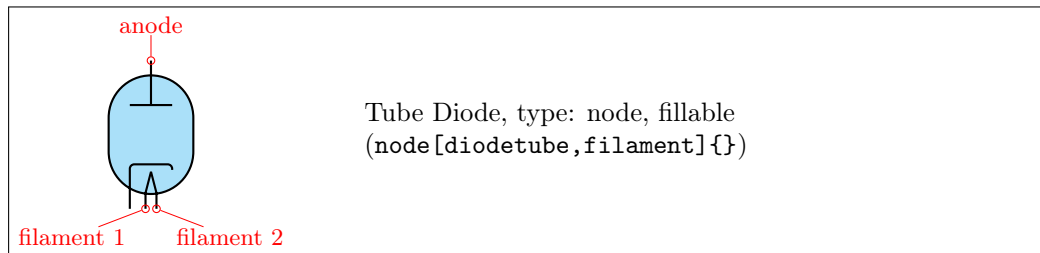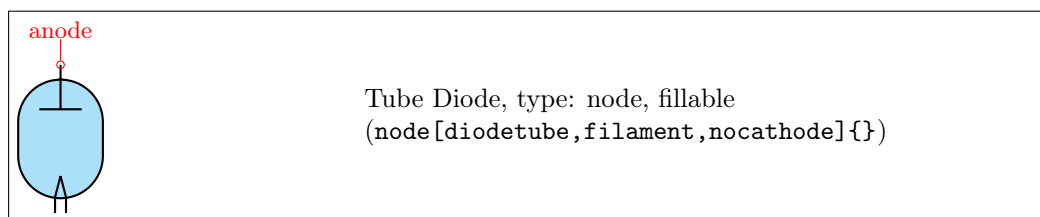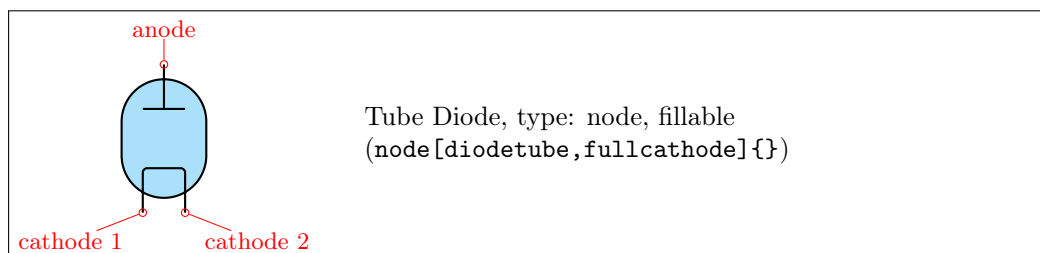|	
anode ⊙ cathode	Tube Diode, type: node, fillable (`node[diodetube]{}`)
anode ⊙ grid ⊙ cathode	Triode, type: node, fillable (`node[triode]{}`)
anode ⊙ screen grid cathode	Tetrode, type: node, fillable (`node[tetrode]{}`)
anode ⊙ suppressor screen grid cathode	Pentode, type: node, fillable (`node[pentode]{}`)
anode ⊙ screen grid cathode	Pentode with suppressor grid connectec to cathode, type: node, fillable (`node[pentode suppressor to cathode]{}`)

Normally, the filament is not drawn. If you want a filament, put the `filament` option in the node description:

anode

Tube Diode, type: node, fillable
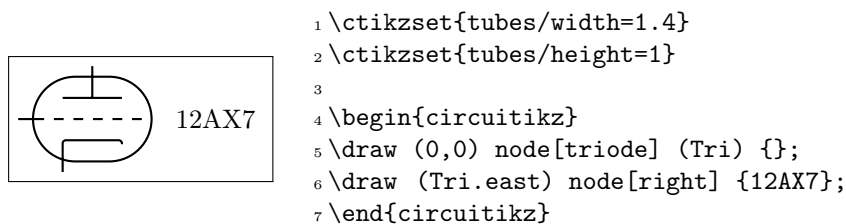(`node[diodetube,filament]{}`)

filament 1   filament 2

Sometimes, you don't want the cathode to be drawn (but you do want the filament). Use the `nocathode` option in the node description:

anode

Tube Diode, type: node, fillable
(`node[diodetube,filament,nocathode]{}`)

If you want a full cathode to be drawn, use the `fullcathode` option in the node description. You can then use the anchors `cathode 1` and `cathode 2`.

anode

Tube Diode, type: node, fillable
(`node[diodetube,fullcathode]{}`)

cathode 1   cathode 2

If you want a wide tube, you can set the width and the height of the tube. You can set the tube's model with the `east` anchor:

12AX7

```
1 \ctikzset{tubes/width=1.4}
2 \ctikzset{tubes/height=1}
3
4 \begin{circuitikz}
5 \draw (0,0) node[triode] (Tri) {};
6 \draw (Tri.east) node[right] {12AX7};
7 \end{circuitikz}
```

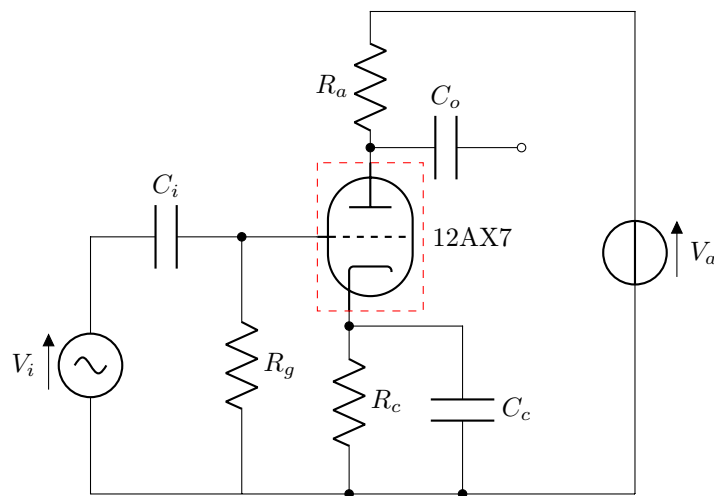Example triode amplifier:

```
1 \begin{circuitikz}
2 \draw (0,0) node (start) {}
3             to[sV=$V_i$] ++(0,2+\ctikzvalof{tubes/height})
4             to[C=$C_i$] ++(2,0) node (Rg) {}
5             to[R=$R_g$] (Rg |- start)
6 (Rg)        to[short,*-] ++(1,0)
7             node[triode,anchor=grid] (Tri) {} ++(2,0)
```

```
 8 (Tri.cathode)  to[R=$R_c$,-*] (Tri.cathode |- start)
 9 (Tri.anode)    to [R=$R_a$] ++(0,2)
10               to [short] ++(3.5,0) node(Vatop) {}
11               to [V<=$V_a$] (Vatop |- start)
12               to [short] (start)
13 (Tri.anode)   ++(0,0.2) to[C=$C_o$,*-o] ++(2,0)
14 (Tri.cathode) ++(0,-0.2) to[short,*-] ++(1.5,0) node(Cctop) {}
15               to[C=$C_c$,-*] (start -| Cctop)
16 ;
17 \draw[red,thin,dashed] (Tri.north west) rectangle (Tri.south east);
18 \draw (Tri.east) node[right] {12AX7};
19 \end{circuitikz}
```



```
</documentation>
```

Width greater than height