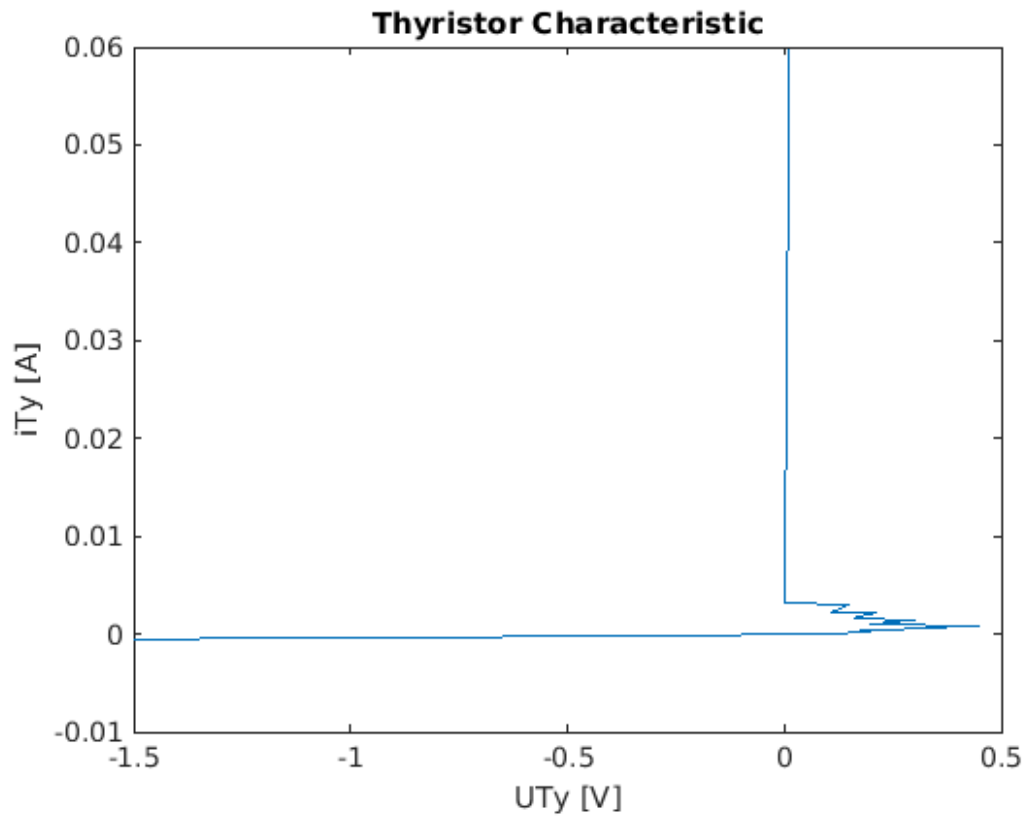

```
% Charakterystyka Tyrystora
% CharTyr_1
clearvars
global iprog; iprog=0.03;
global Rblock; Rblock=1000;
ip=-0.0005;
ik=0.06;
step=0.0001;
Nstep=(ik-ip)/step;
[i]=[ip:step:ik];
  for k=1:Nstep+1 UTy(k)=i(k)*rezystancja(i(k)); end
plot(UTy,i)
xlabel('UTy [V]')
ylabel('iTy [A]')
title('Thyristor Characteristic')
function Rez=rezystancja(x)
global iprog; global Rblock;
if x>0.1*iprog Rez=0.0002*Rblock;
elseif x>0.07*iprog Rez=0.05*Rblock;
elseif x>0.05*iprog Rez=0.1*Rblock;
elseif x>0.03*iprog Rez=0.2*Rblock;
elseif x>0.01*iprog Rez=0.5*Rblock;
elseif x>0 Rez=Rblock;
elseif x>-0.01*iprog Rez=2*Rblock;
elseif x>-0.03*iprog Rez=3*Rblock;
elseif x>-0.05*iprog Rez=4*Rblock;
elseif x>-0.07*iprog Rez=5*Rblock;
elseif x>-0.09*iprog Rez=6*Rblock;
elseif x>-0.11*iprog Rez=8*Rblock;
else Rez=15*Rblock;
end
end
```



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