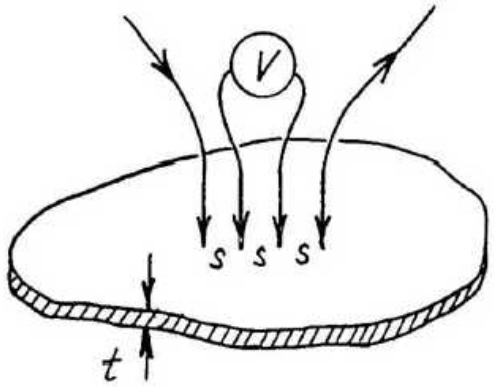
D.2) Thin Sample.



When the sample is thin, it is more convenient to write the resistivity in the form given by Smits (e) :

$\rho = G\frac{V}{I}$, where

$$G = \frac{\pi}{\ln 2}\cdot t\cdot T_2\left(\frac{t}{s}\right) = 4.5324\cdot t\cdot T_2\left(\frac{t}{s}\right); \qquad (11)$$

$\frac{\pi}{\ln 2}\cdot t = 4.5324\cdot t$ is the geometric factor for an infinitely large, thin slice (e). Thin slice means $\frac{t}{s} \ll 1$ (in practice $\frac{t}{s} \lesssim 0.5$).

T_2 is an additional correction factor to apply when t is not much less than s.

$T_2 \rightarrow 1$ as $\frac{t}{s} \rightarrow 0$.

$T_2\left(\frac{t}{s}\right)$ is tabulated and plotted on the following page.