File Edit View Project Simulate Options Tools Scripts Window Help

New Project	Ctrl+N	
New With Library	▶	AWR Example Libraries ▶
Open Project...	Ctrl+O	Browse...
Import Project...		Purge...
Open Example...		
Close Project		
Save Project	Ctrl+S	
Save Project As...		
Archive Project...		
Email Project	▶	

AWR Example Libraries ▶
AWR_MESFET
AWR_Module
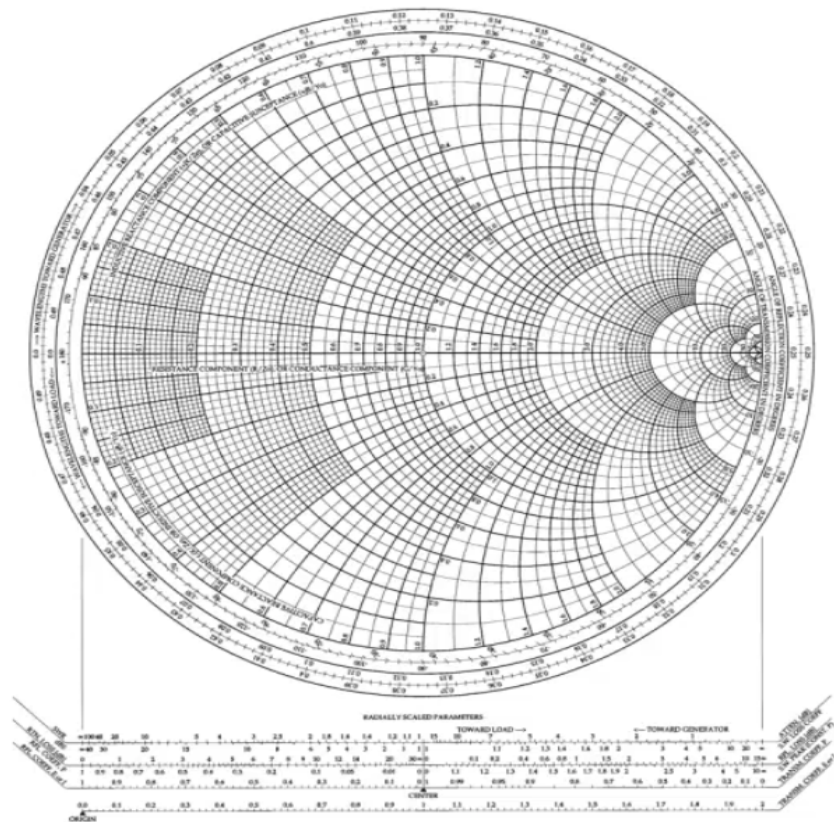AWR_PCB
AWR_RFBoard_2layer
GenESE_GenBic35

The Complete Smith Chart
Black Magic Design

Key points to remember:

1. Smith Chart is a polar chart representing complex impedances (Z) or admittances (Y)
2. We have: Z, Y or ZY Smith charts
3. Top half is Inductive and Bottom half is Capacitive
4. It is a normalized plot with respect to Z0 and Z0 can be 50, 75, 100 Ohms or any other value.
5. We have constant Resistance (R) & Conductance (G) circles, constant Reactance (X) & Susceptance (B) circles and intersection points of these circles, represents a complex Impedance or Admittance.
6. One complete round around Smith Chart represents ½ wavelength
7. We can compute SWR, Reflection Coefficient, Loss etc using the Smith Chart
8. We can use R, L and C (all series or shunt) to realize our discrete matching networks OR use transmission lines, Open Circuit Stub and Short Circuit stub for distributed matching network design.
9. We can operate on a single frequency at a time for our network design