The moral is that grounded-grid tetrodes are really not as simple as they seem, and need some careful thought and planning about the DC arrangements.

Another alternative, which retains the advantages of no input tuning, transceiver-compatible drive requirements and no need for neutralization, is 'passive grid' (Fig 3). Here the cathode is grounded and the RF drive voltage to the control grid is developed across a 50 Ohms input resistor which provides a fairly constant wideband input impedance and greatly improves the amplifier's stability against oscillation. Passive grid is suitable for the entire HF band, up to the frequency where the valve's input capacitance begins to affect the input impedance. Although the power supplies are still more complex than for a grounded-grid triode, operating a tetrode in passive grid does have the advantage that all the necessary supplies have one rail at or very close to DC ground.

Fig 3: 'Passive grid' with grounded cathode is a popular option for using tetrodes at HF.

Tetrodes are wonderful - and sometimes they're the only available way to go - but if you're not prepared to meet their biasing requirements, steer well clear and use a genuine triode instead.