Bode Diagram Gm = -12.6 dB (at 13.1 rad/s), Pm = 7.23 deg (at 99.8 rad/s) **Root Locus Root Locus** 200 X Current poles X Current poles Imaginary Axis (seconds⁻¹) Imaginary Axis (seconds⁻¹) 100 Magnitude (dB) ** ×× ×× Xo 100 -200 -20 -50 50 -20 -10 10 Real Axis (seconds⁻¹) Real Axis (seconds⁻¹) -50 -135 **Step Response** Phase (deg) -180 Amplitude 1.5 -225 0.5 -270 10⁰ 10² 0.2 0.4 0.6 8.0 1.2 Time (seconds) Frequency (rad/s)