

*A 2ns risetime, 50ns wide pulse will be applied to a dipole antenna which will then resonate at its fundamental design frequency of 200 MHz. The necessary bandwidth will be determined by the characteristic bandwidth of the pulse-excited dipole antenna and the losses associated with the circuit and coupling. It is expected that the antenna will emit a damped sinusoidal waveform of approximately five (5) or more cycles. Performing an FFT on the simulated waveform gives an energy density spectrum with content in the range 50MHz - 300MHz assuming a -20dB threshold criteria.*