

PT6500-02 MPE calculation

Maximum Power output: 453.0125MHz: 3.81W (35.8dB)

Max Antenna gain,: 2.0 dBi

One-half power: 32.8 dBm

Maximum EIRP from transmit antenna is $32.8 + 2.0 = 34.8$ dBm EIRP

To determine the overall exposure at 2.5 cm from the EUT.

The field strength contribution from each antenna is calculated using the equation

$$E, \text{ V/m} = (30 * \text{EIRP, watts})^{0.5} / \text{separation distance}$$

Maximum EIRP from transmit antenna is 34.8 dBm EIRP = 3.02 watt EIRP

$$S, \text{ mW/cm}^2 = E^2 / 3770, \text{ E in V/m}$$

Total exposure at 2.5cm: 0.100 mW.cm²

For PT6500-02, the duty cycle is 50% the final exposure at 2.5cm: 0.05 mW.cm²

FCC Limit: 1.0 mW/cm²