Description
Each circular polarized element is 700µm x 700µm and 300µm thick (see attached picture. The orange antenna element is on a substrate.) TLC can deliver 77 GHz transmit & receive arrays that are less than 1.5 x 1.5 inches including the integrated feedline. These array elements are presently undergoing testing at TLC and by the US government (NASA & Air Force). The design, simulation and models expect a gain > 5 dBi per element. TLC has developed a simplified high performance W-Band patch antenna that can also be integrated with the 77 GHz transceiver.

Features
- 10 to 95 GHz Series
- Bandwidth = 1 GHz to 3 GHz
- Gain > 5 dBi
- Sidelobe < -22 dBc
- Dimensions ~ 700µm x 700µm at 95 GHz
- Waveguide Connector to Customer Specs
- Mounting Hole Optional

Performance Data

Fig. Measured Return loss of TLC’s circular polarize W-band antenna
(This one is designed for 94 GHz)