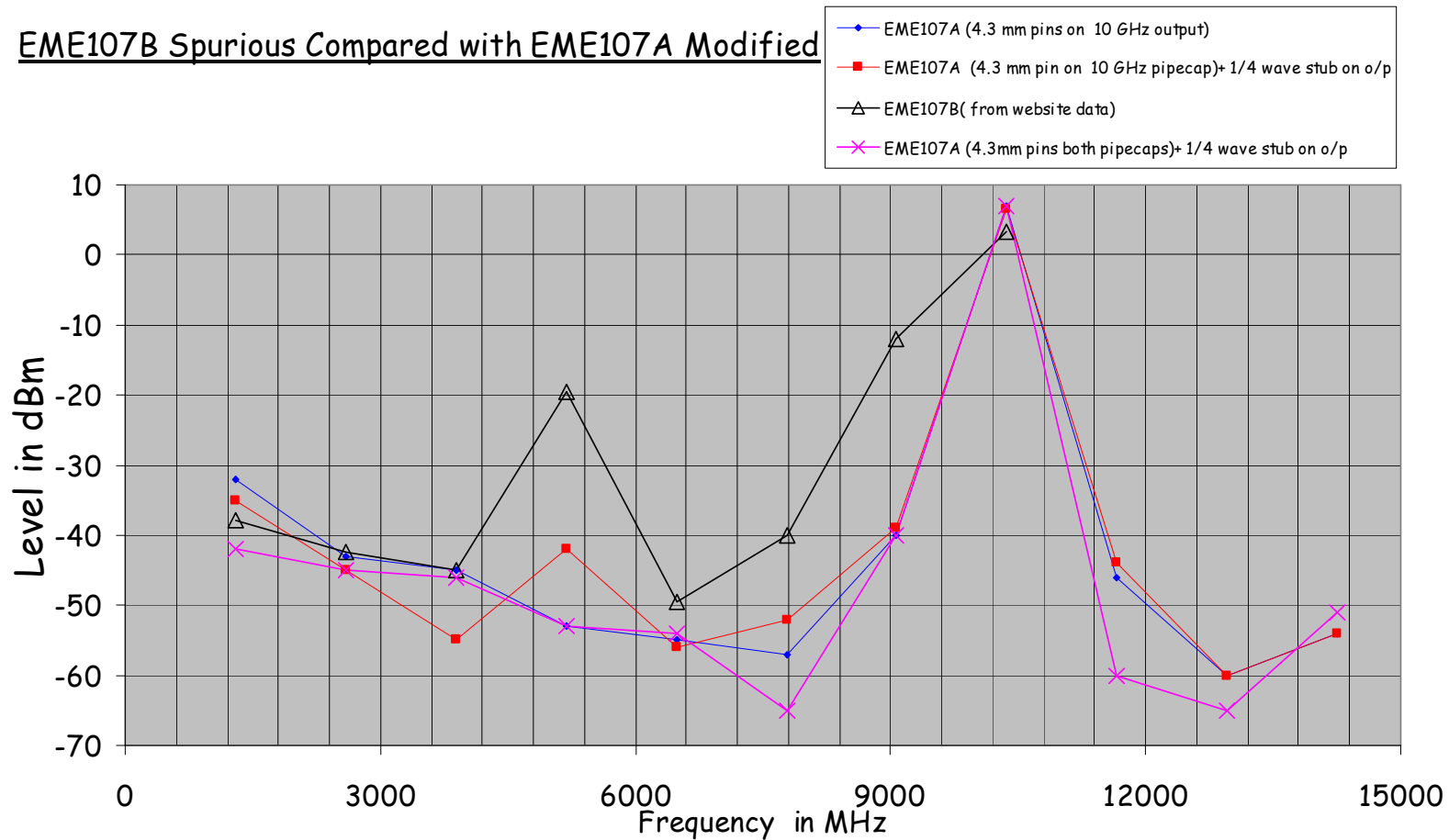


EME107B Spurious Compared with EME107A Modified



Comments I assume that the matrix pins are left at 6.35mm length to allow for use of ATV bandwidths. If using the EME107A or B for narrowband applications, such as a beacon or LO, then the pins may be shortened to 4.35 mm which improves the spurious rejection (as the graph above shows). When tuning the input frequency 1296 MHz (by +/- 5 MHz), the level now falls by > 3 dB, indicating higher loaded Q of the filters. The shorter pins could possibly be used with the 5 GHz version, as well. I added a $\frac{1}{4}$ wave short-circuit stub on the output, however this had a minor effect. I was able to optimise the output level by finding the sensitive areas, using a tuning stick (copper or brass shim glued to a cutoff cotton bud), then the addition of silver paint. (Jaycar)

+7 dBm at 1296 MHz gives ~ +7 dBm at 10368 MHz

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