

mCHF RF power measurements and calculations (extract1)

(5W and FULL PWR adjustments + IZ6MAF (21.1.2016) ESD, Bias mods)

Date: 23.1.2016

S53DZ

U_{supply} = 12,6V

PA BIAS = 107

TEMP = 23C

CW PA BIAS = 0

FW = 219_26_4 (KA7OEI)

A) Without IZ6MAF ESD and bias modifications

| band (m) | 5W setup1 (85) | PWR (W) | 2f (dBc) | Full PWR setup1 (85) | PWR (W) | 2f (dBc) |
|----------|----------------|---------|----------|----------------------|---------|----------|
| 80 | 4 | 7,3 | -47 | 17 | 19,2 | -45 |
| 60 | 10 | 13,0 | -55 | 15 | 14,2 | -50 |
| 40 | 6 | 5,9 | -50 | 18 | 12,0 | -50 |
| 30 | 9 | 5,0 | -42 | 18 | 12,9 | -35 |
| 20 | 14 | 6,0 | -50 | 40 | 13,1 | -50 |
| 17 | 21 | 6,0 | -32 | 49 | 11,4 | -30 |
| 15 | 29 | 5,9 | -45 | 60 | 9,4 | -45 |
| 12 | 43 | 6,2 | -47 | 80 | 7,8 | -42 |
| 10 | 65 | 5,5 | -50 | 85 | 5,9 | -48 |

B) With IZ6MAF ESD and bias modifications

| band (m) | 5W setup1 (85) | PWR (W) | 2f (dBc) | Full PWR setup1 (85) | PWR (W) | 2f (dBc) |
|----------|----------------|---------|----------|----------------------|---------|----------|
| 80 | 4 | 8,6 | | 17 | 19,7 | |
| 60 | 10 | 13,3 | | 15 | 14,5 | |
| 40 | 6 | 6,8 | | 18 | 12,3 | |
| 30 | 9 | 5,8 | | 18 | 13,5 | |
| 20 | 14 | 6,9 | | 40 | 13,7 | |
| 17 | 21 | 6,7 | | 49 | 12,5 | |
| 15 | 29 | 6,8 | | 60 | 11,3 | |
| 12 | 43 | 7,5 | | 80 | 9,0 | |
| 10 | 65 | 6,6 | | 85 | 6,9 | |