HIGH POWER AMPLIFIER   RFS-2G42G51K0+

Typical Performance Curves

CONDITION: POWER AMPLIFIER MODE (T_{WATER} = +20°C, 50Ω SYSTEM)

Gain (dB) vs Pout(dBm)

— 2400 MHz   — 2450 MHz   — 2500 MHz

The RFS-2G42G51K0 is set to amplifier mode in the GUI. This is the AM-AM curve as a result of an external CW input.

PxdB(dBm) vs Frequency (GHz)

— P1dB   — P2dB   — P3dB

The RFS-2G42G51K0 is set to amplifier mode in the GUI. This is the output power at a compression point referenced to the maximum gain recorded for the given frequency

Gain(dB) vs Frequency (GHz) at 1kW output power

— Gain

The RFS-2G42G51K0 is set to amplifier mode in the GUI. This is the graph of the gain at a fixed output power of 1KW.

HIGH POWER AMPLIFIER   RFS-2G42G51K0+

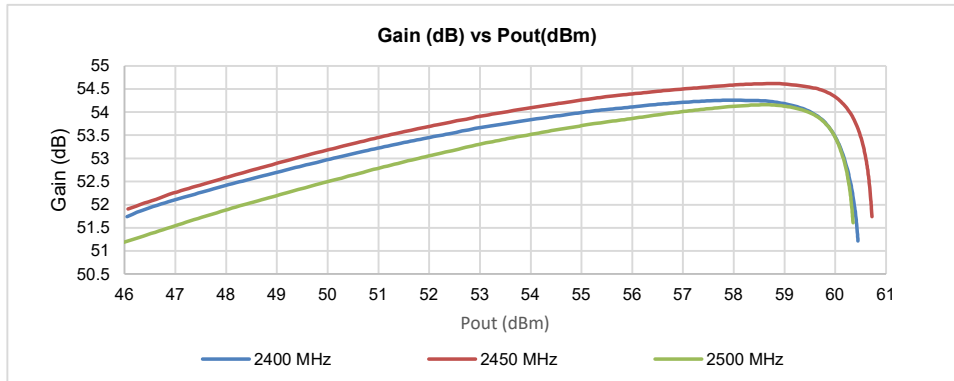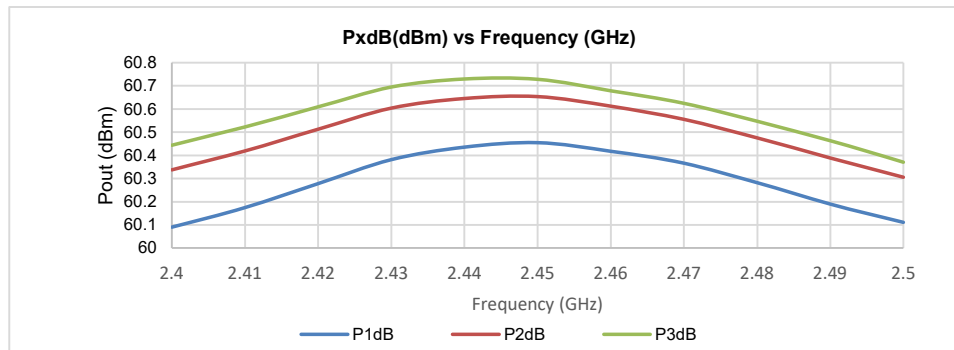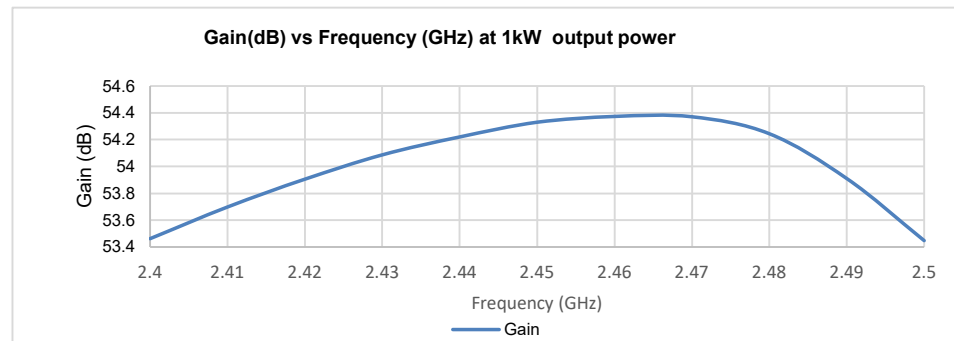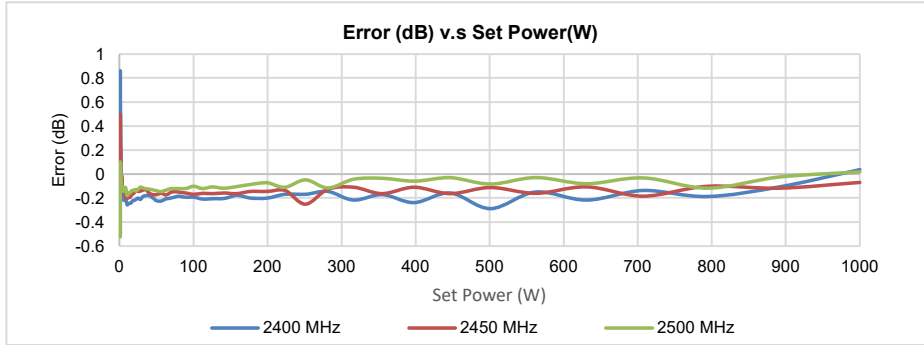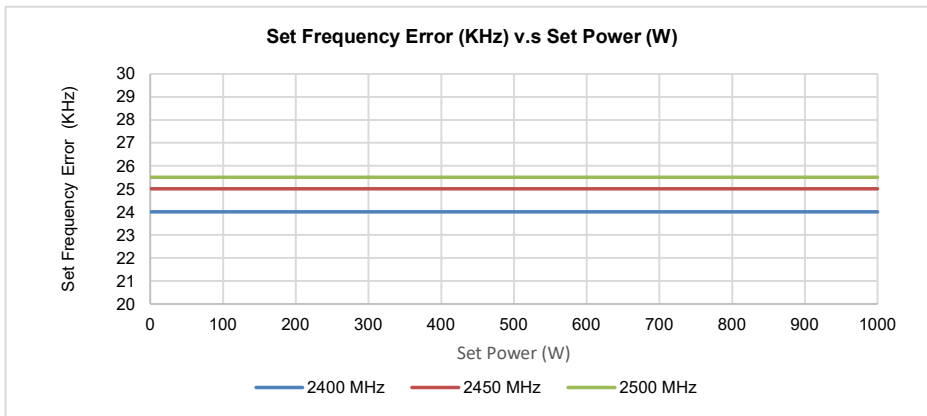## *Typical Performance Curves*
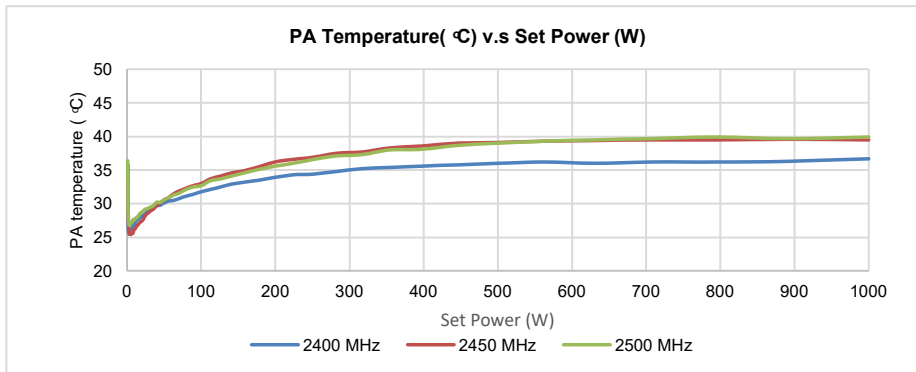
CONDITION: AUTO GAIN MODE   (T_{WATER} = +20°C, 50Ω SYSTEM)

The RFS-2G42G51K0 is set to Normal Mode in the GUI. This is the error recorded in dB of the power measured by an external power meter to the power that was requested on the GUI front panel.
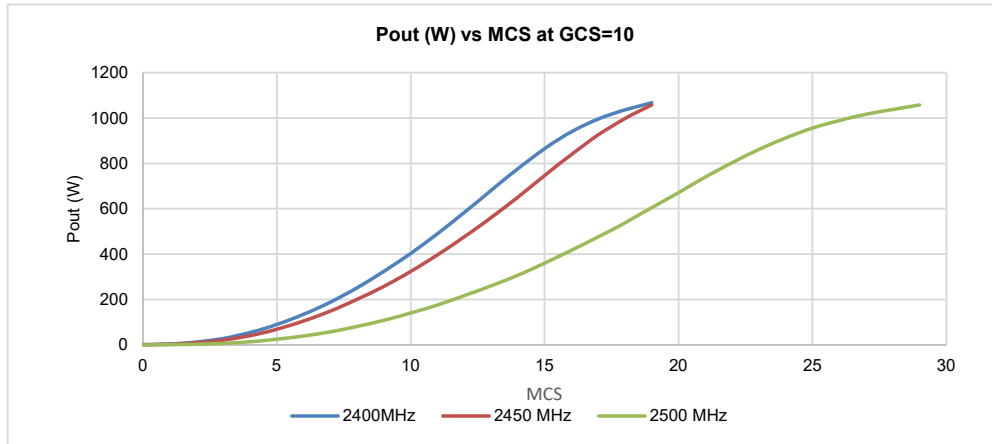

The RFS-2G42G51K0 is set to Normal Mode in the GUI. This is the error recorded in kHz of the Frequency measured by an external spectrum analyzer to the frequency that was requested on the GUI front panel.
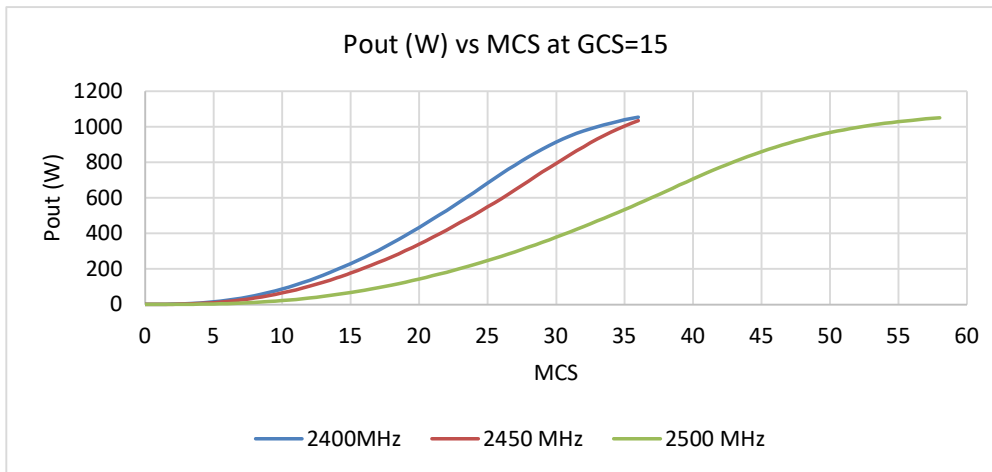

The RFS-2G42G51K0 is set to Normal Mode in the GUI. This is the maximum temperature recorded on the internal power amplifiers. Each power set point is dwelled approximately 2 seconds for the power measurement. The water temperature was set to 24°C

HIGH POWER AMPLIFIER   RFS-2G42G51K0+

Typical Performance Curves

CONDITION: FEED FORWARD MODE (T_{WATER} = +20°C, 50Ω SYSTEM)

Pout (W) vs MCS at GCS=10

The RFS-2G42G51K0 is set to FeedForward mode in the GUI.The GCS value is set to 10dB and the MCS value is varied until 1KW is achieved.GCS is a coarse attenuator value and the MCS setting is a higher resolution output of an RF modulator


Pout (W) vs MCS at GCS=15

The RFS-2G42G51K0 is set to FeedForward mode in the GUI. The GCS value is set to 15dB and the MCS value is varied until 1KW is achieved. GCS is a coarse attenuator value and the MCS setting is a higher resolution output of an RF modulator

HIGH POWER AMPLIFIER   RFS-2G42G51K0+

Typical Performance Curves

CONDITION: FEED FORWARD MODE WITH OUTPUT POWER SET TO 1KW   (T_{WATER} = +20°C, 50Ω SYSTEM)
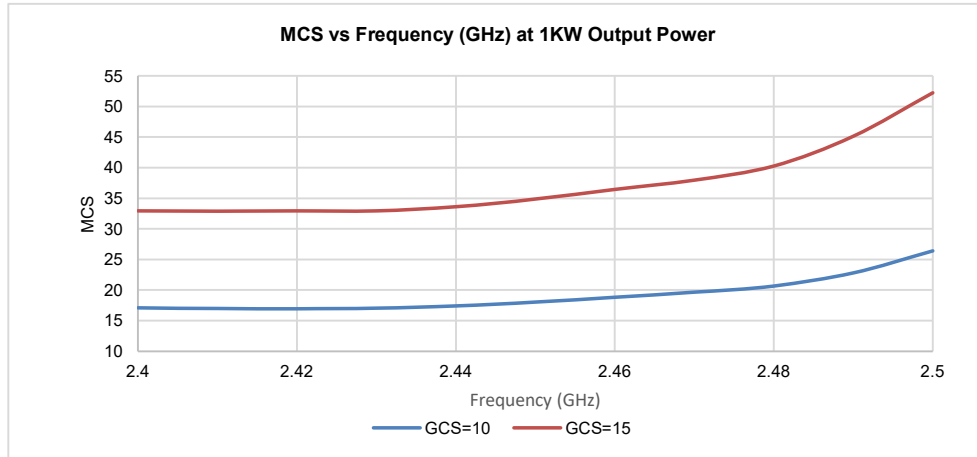
The RFS-2G42G51K0 is set to FeedForward mode in the GUI. This shows the MCS setting required at a given GCS value to get 1KW output