

F1490 INITIAL DESIGN VALIDATION DATA

2019 OCTOBER 30

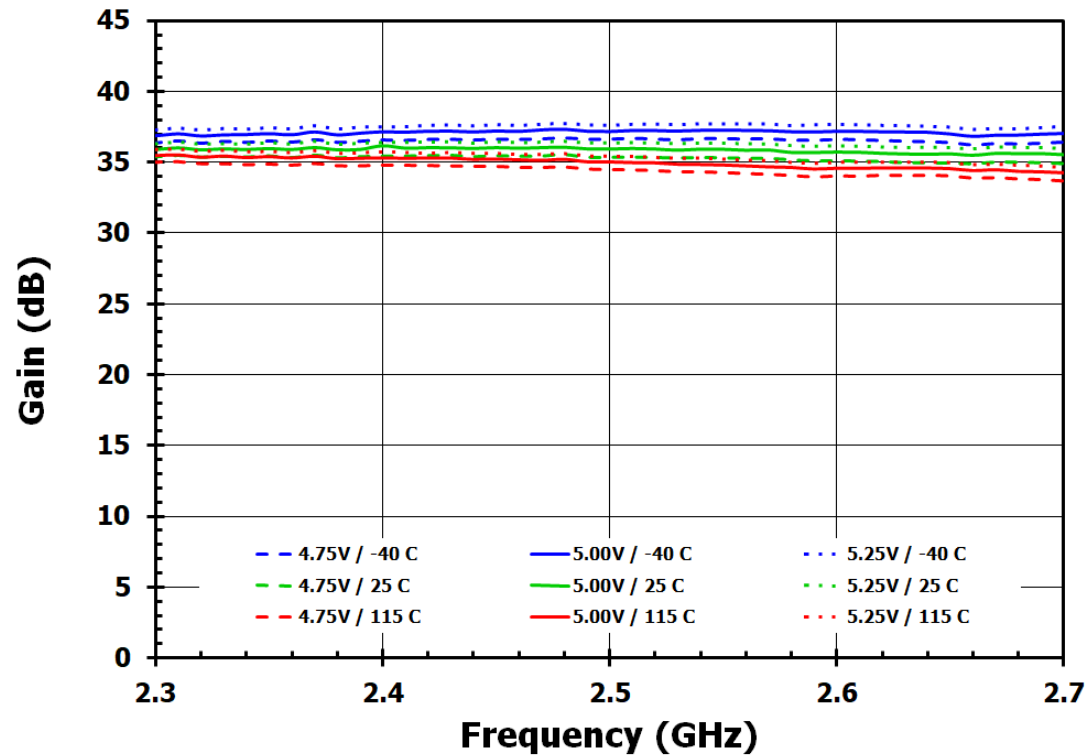
EXECUTIVE SUMMARY

- Measurement data of key F1490 RF parameters across operating voltage and temperature presented.
- Single BOM used for both low gain and high gain modes.
- BOM optimized for low gain mode performance.
- Performance can be improved for high gain mode with optimal BOM.

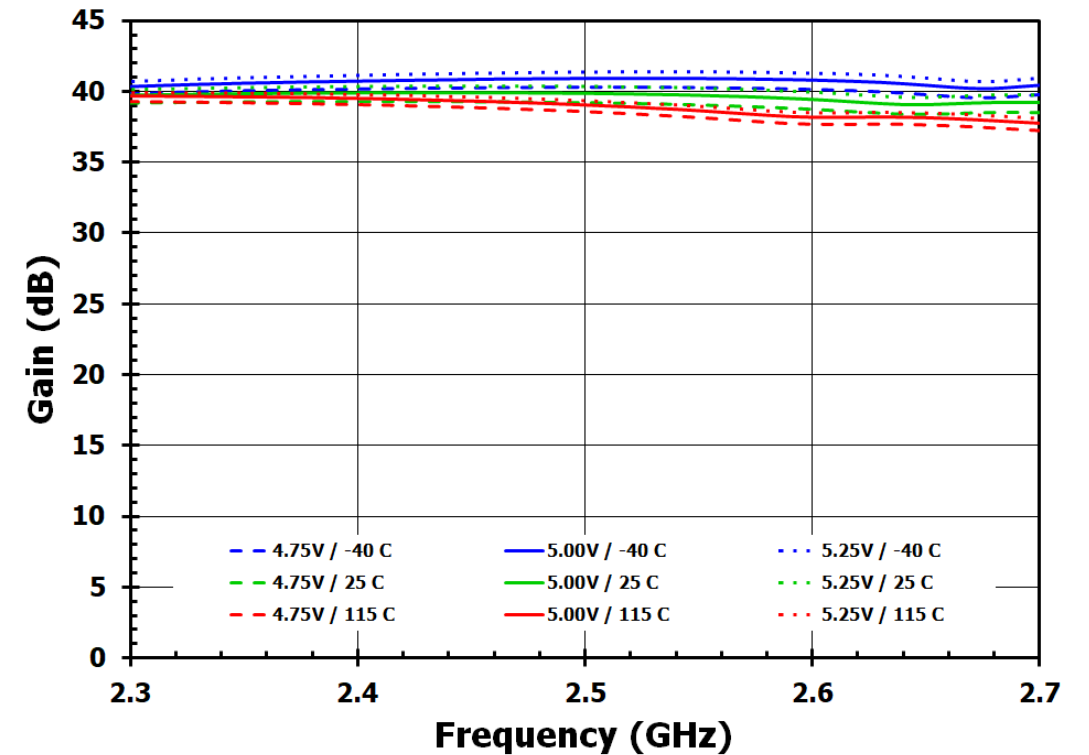
2.3GHZ – 2.7GHZ BOM DATA

S-PARAMETERS (1 OF 4)

Gain at Low Gain Setting

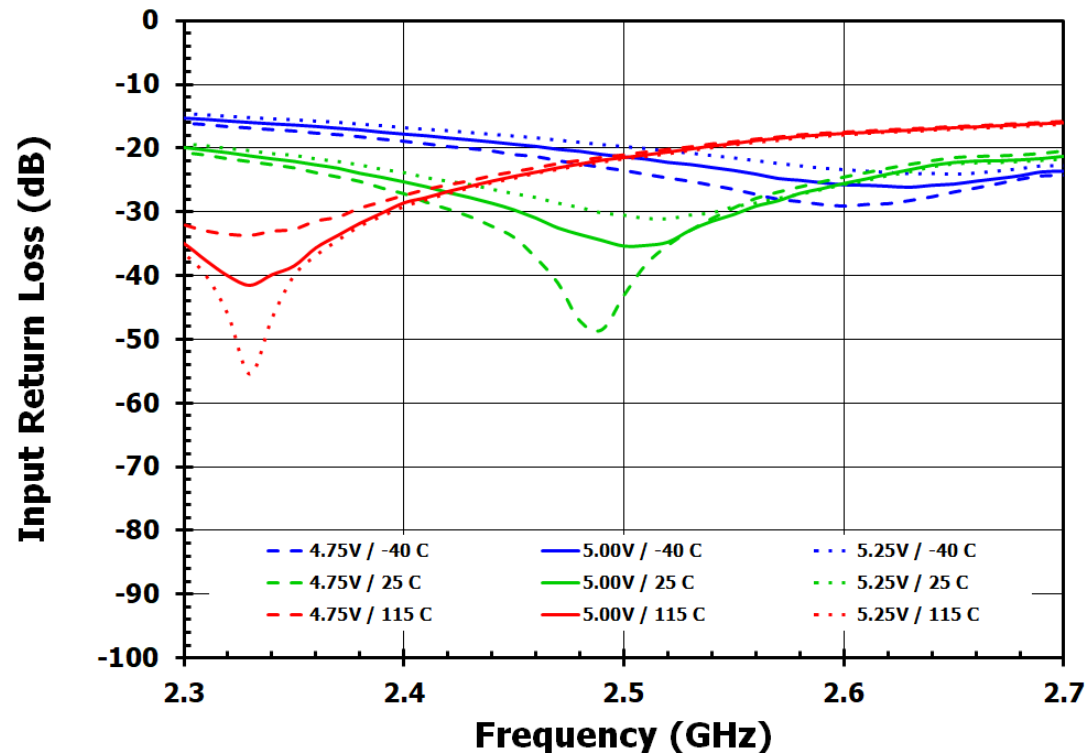


Gain at High Gain Setting

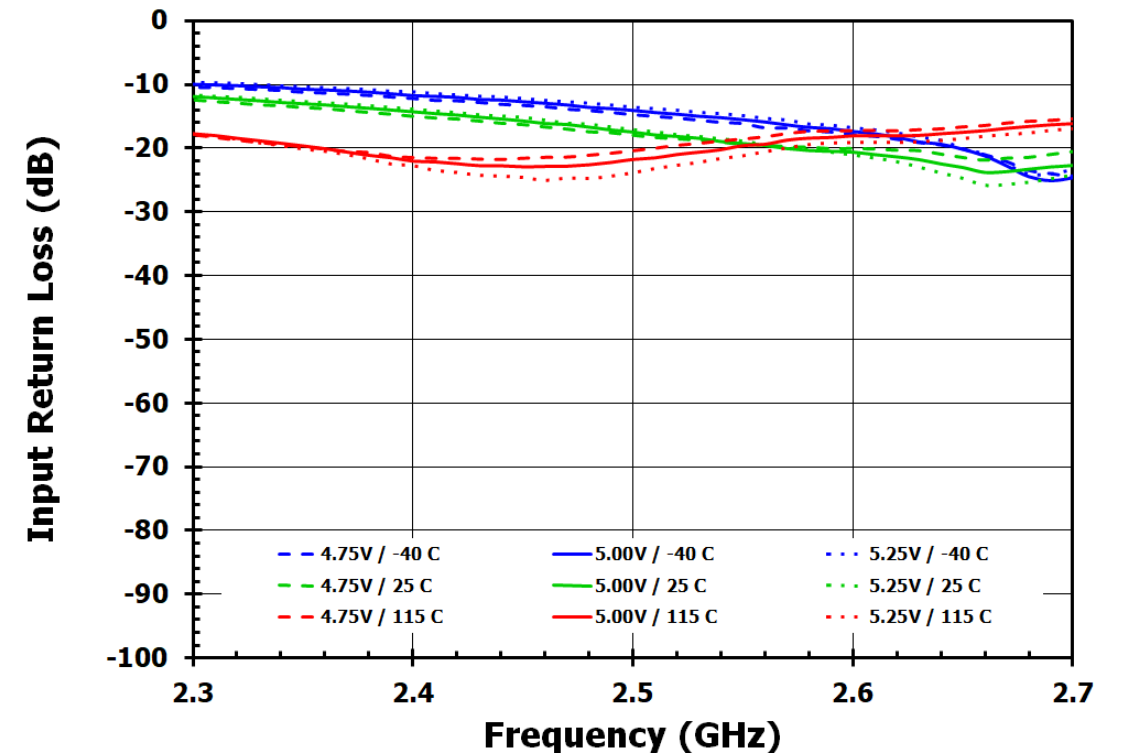


S-PARAMETERS (2 OF 4)

Input Return Loss at Low Gain Setting

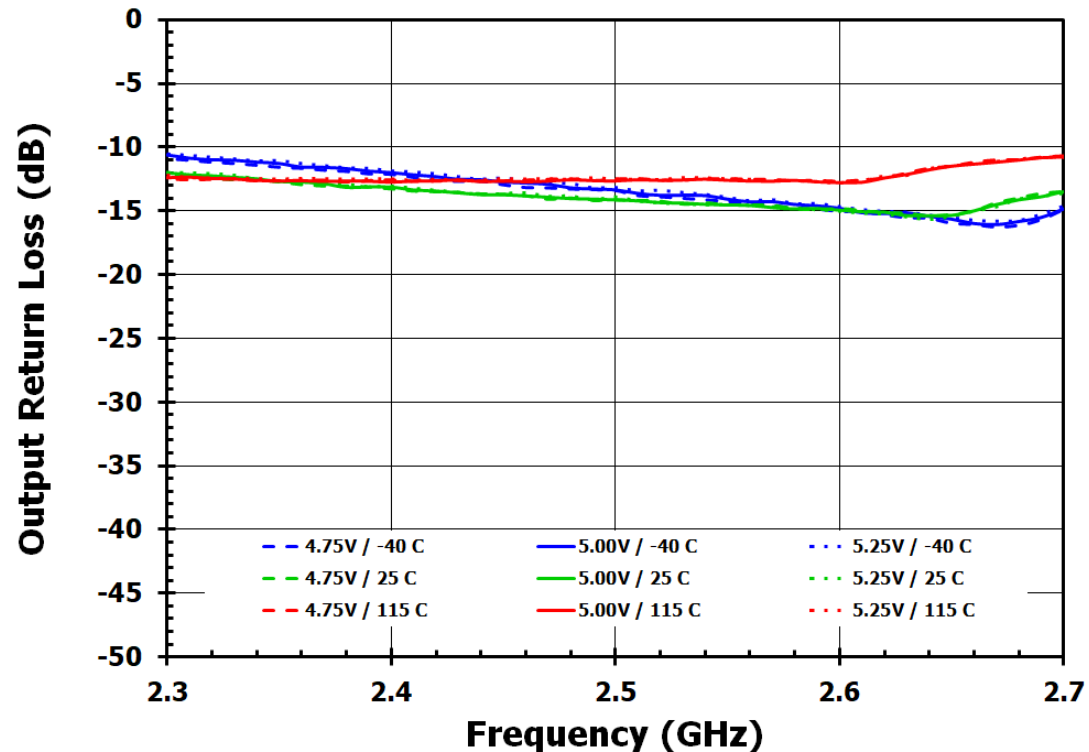


Input Return Loss at High Gain Setting

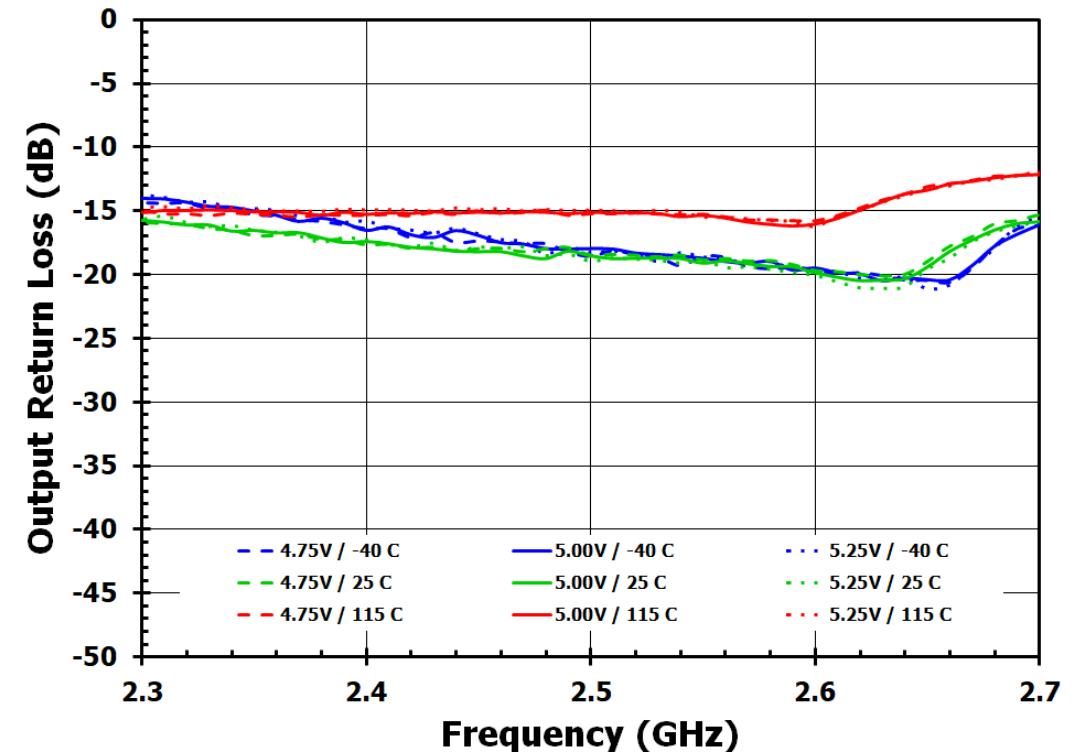


S-PARAMETERS (3 OF 4)

Output Return Loss at Low Gain Setting

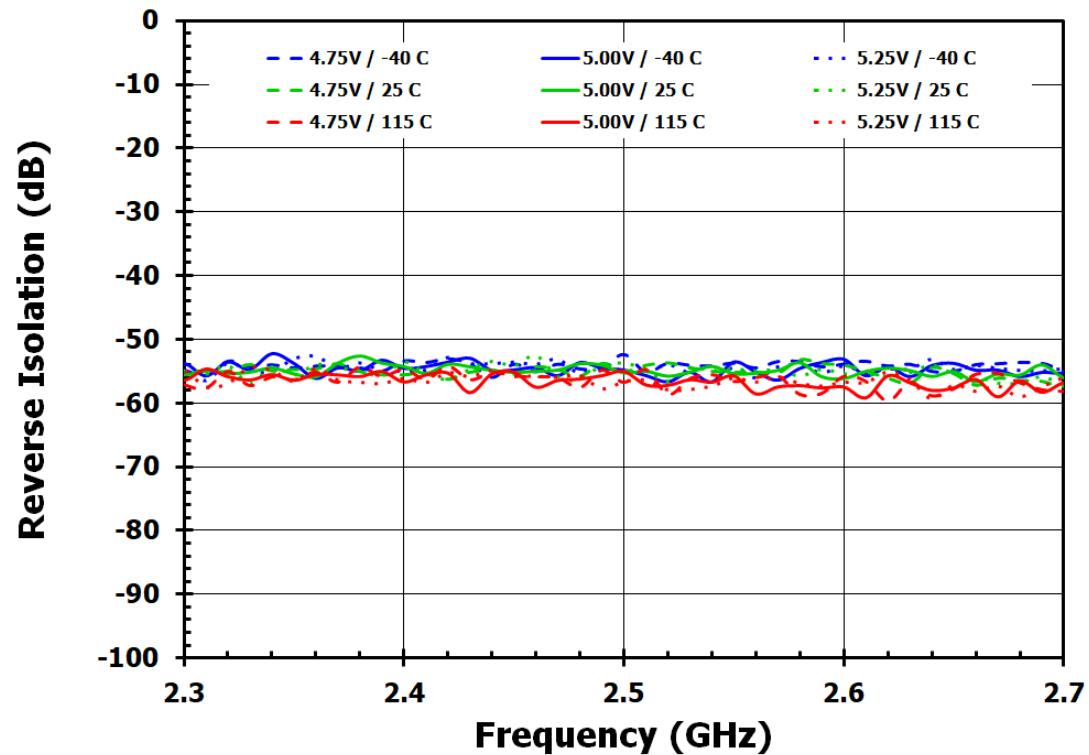


Output Return Loss at High Gain Setting

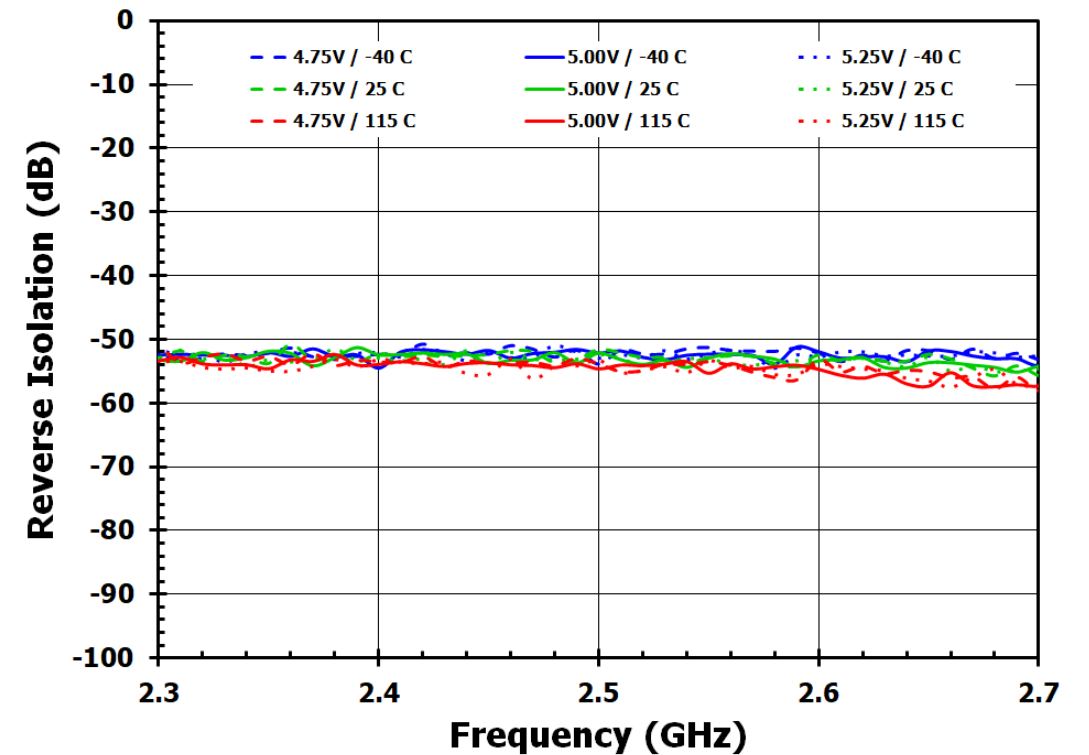


S-PARAMETERS (4 OF 4)

Reverse Isolation at Low Gain Setting

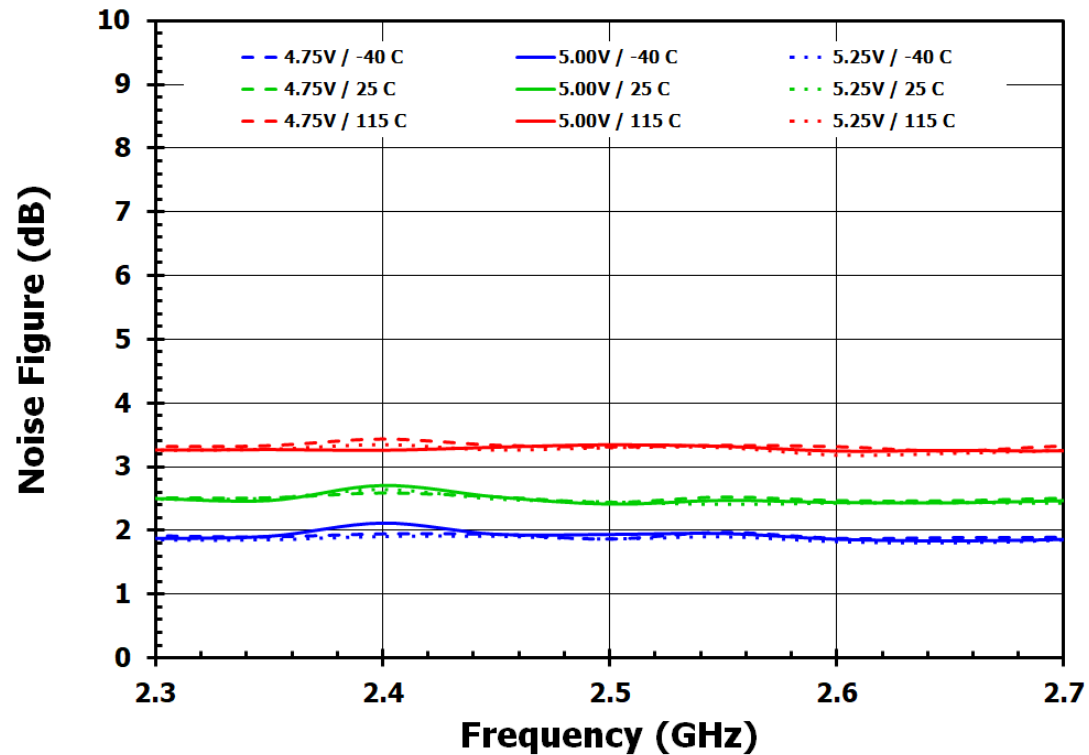


Reverse Isolation at High Gain Setting

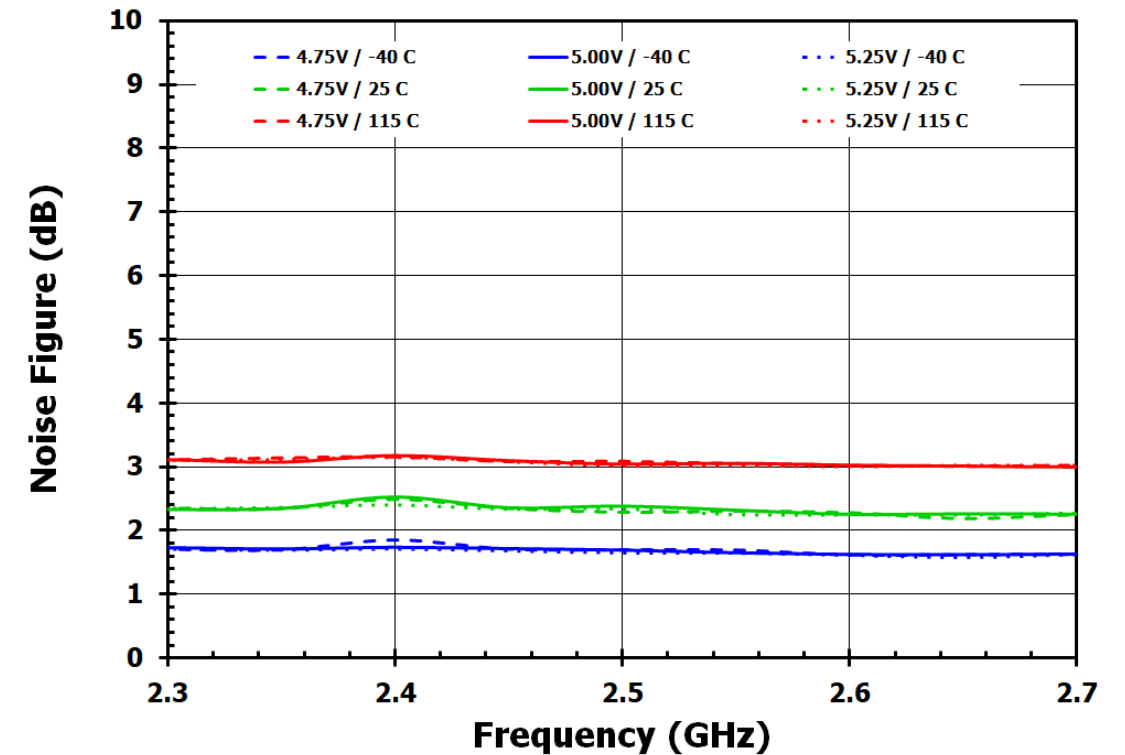


NOISE FIGURE

Noise Figure at Low Gain Setting

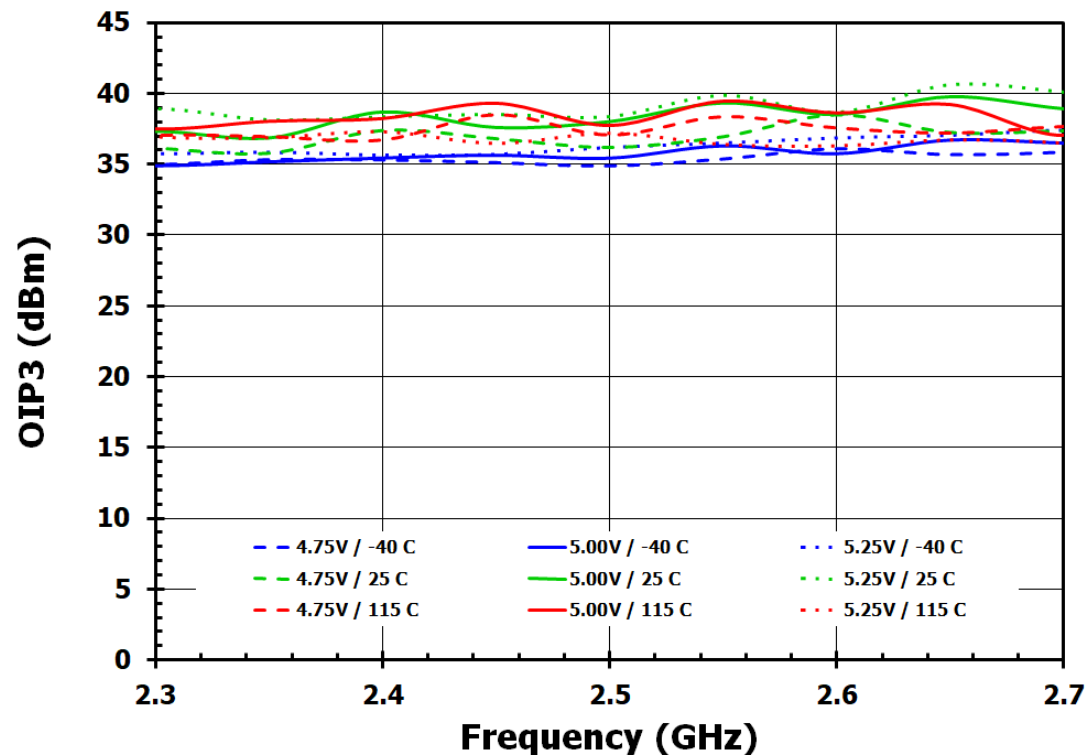


Noise Figure at High Gain Setting

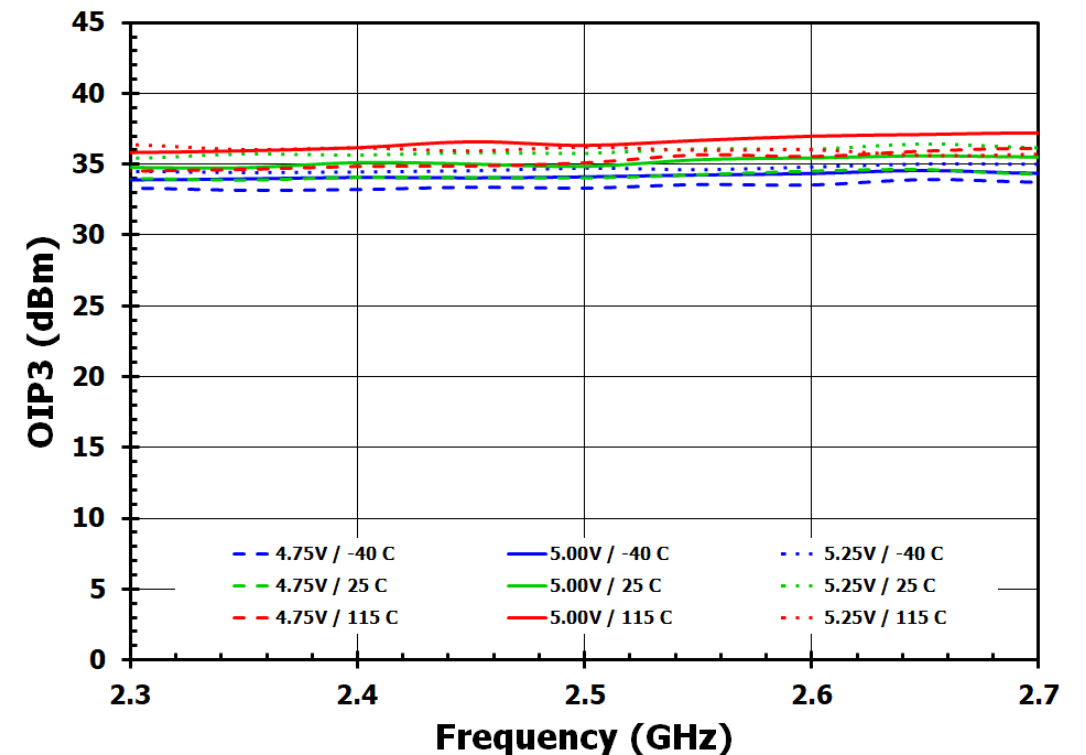


OIP3

OIP3 at Low Gain Setting

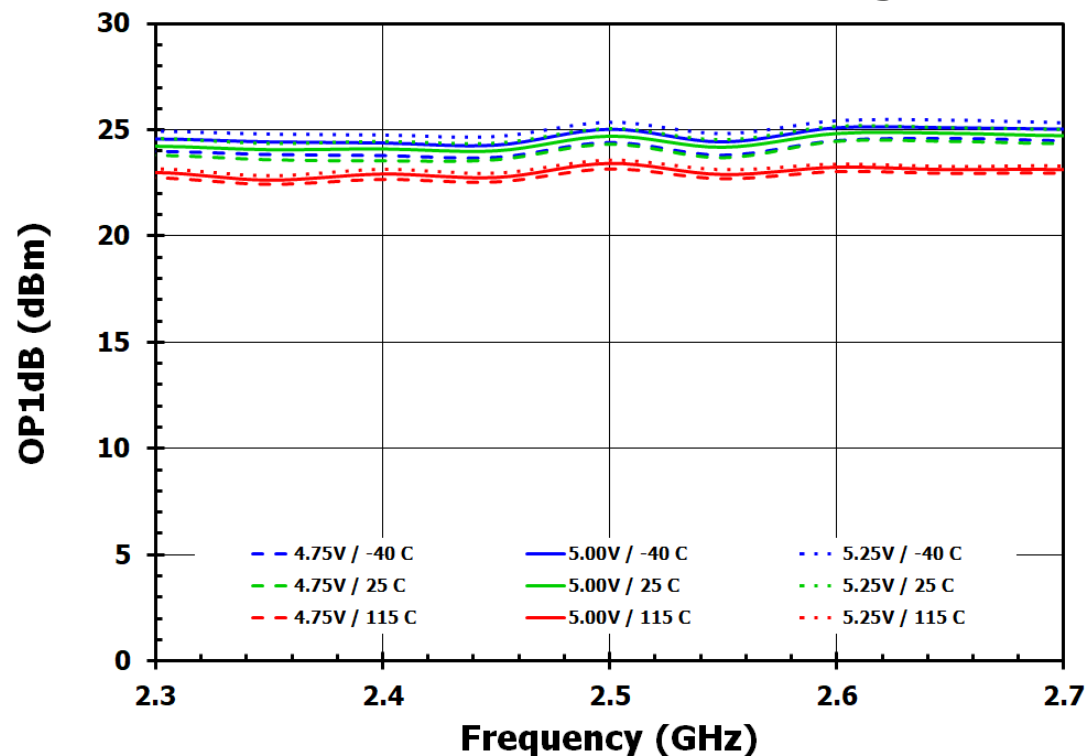


OIP3 at High Gain Setting

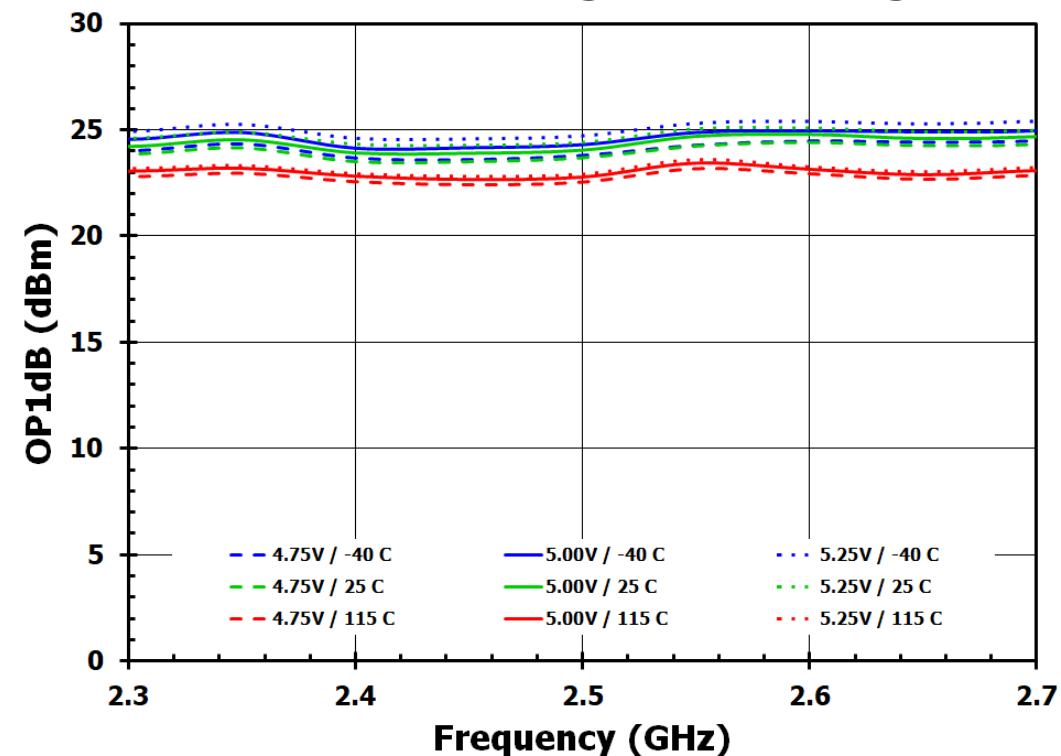


OP1dB

OP1dB at Low Gain Setting



OP1dB at High Gain Setting

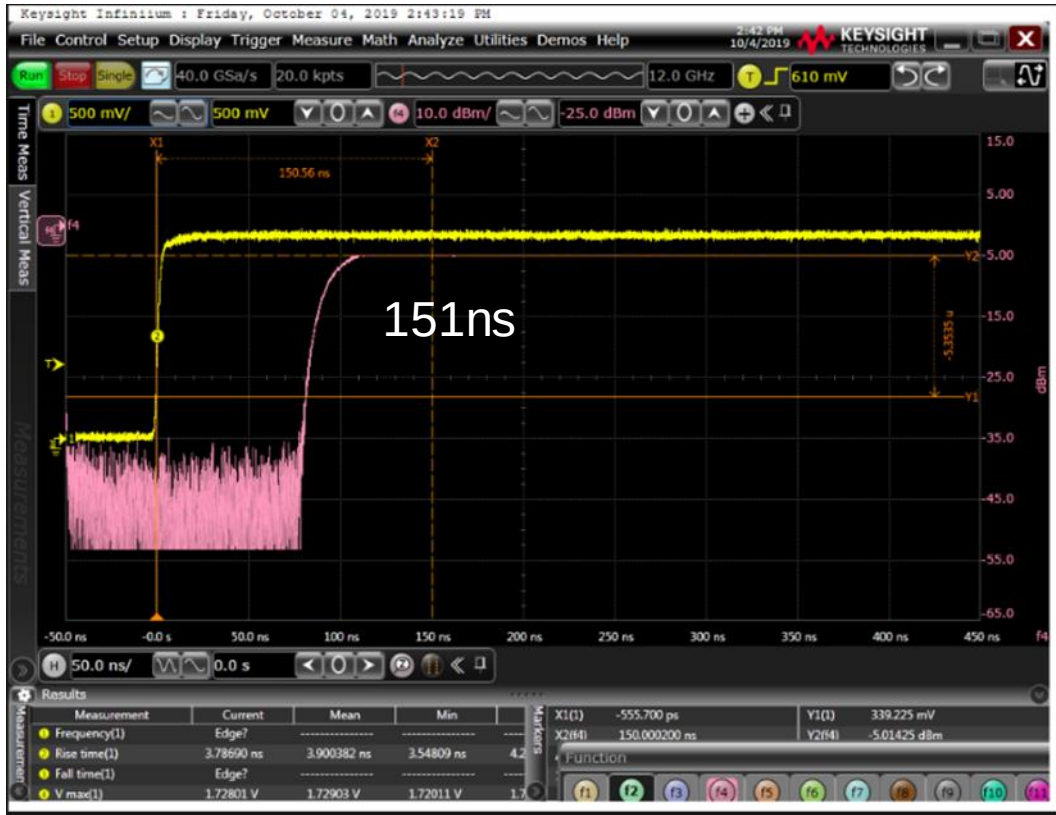


SWITCHING TIME

Power OFF time Low Gain Setting



Power ON time Low Gain Setting



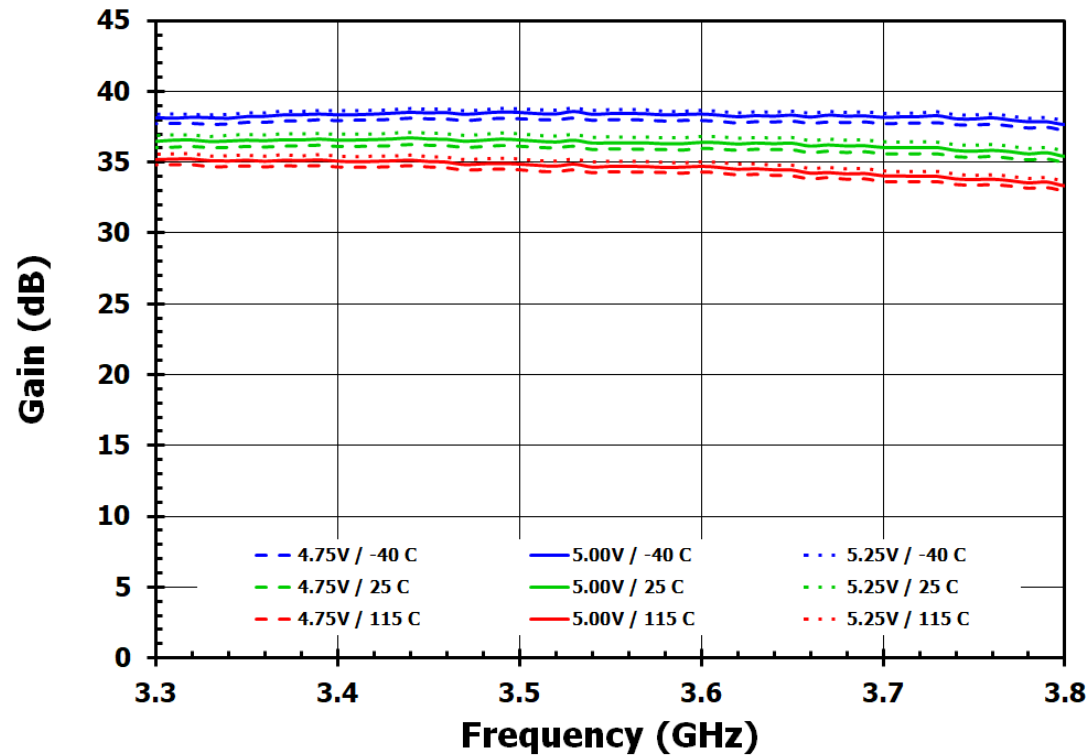
CURRENT CONSUMPTION

Gain Setting	4.75V / -40C	5.00V / -40C	5.25V / -40C	4.75V / 25C	5.00V / 25C	5.25V / 25C	4.75V / 115C	5.00V / 115C	5.25V / 115C
Low Gain	72	80	87	64	70	76	60	66	70
High Gain	72	80	87	64	72	77	61	66	70

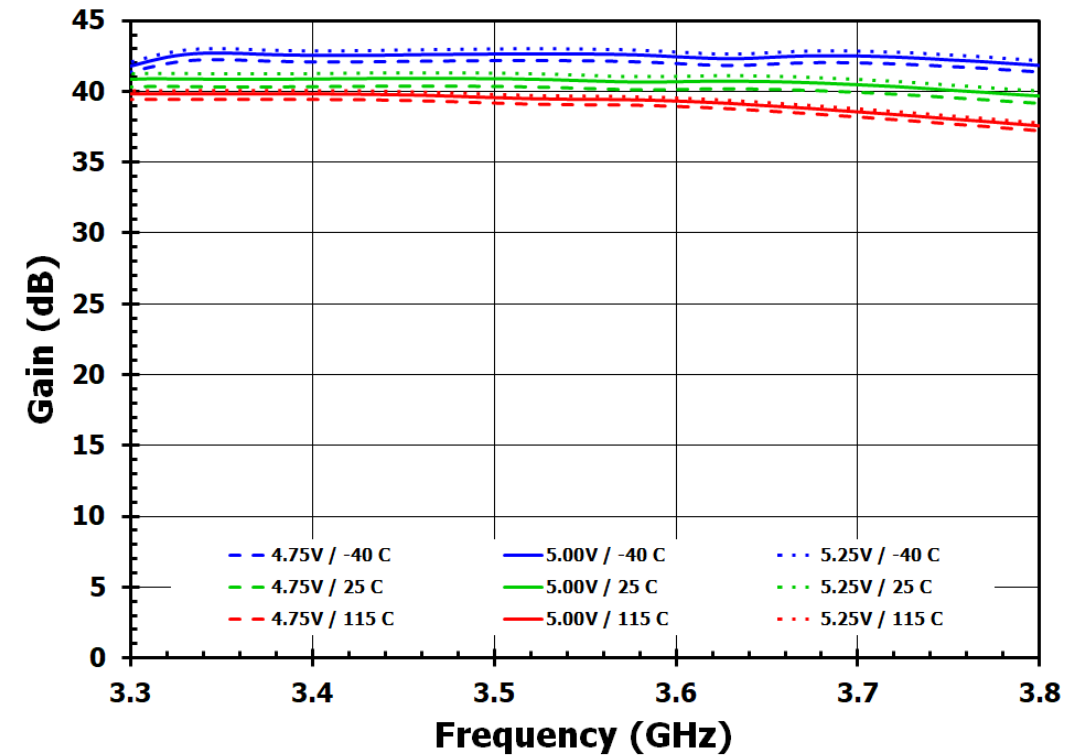
3.3GHZ – 3.8GHZ BOM DATA

S-PARAMETERS (1 OF 4)

Gain at Low Gain Setting

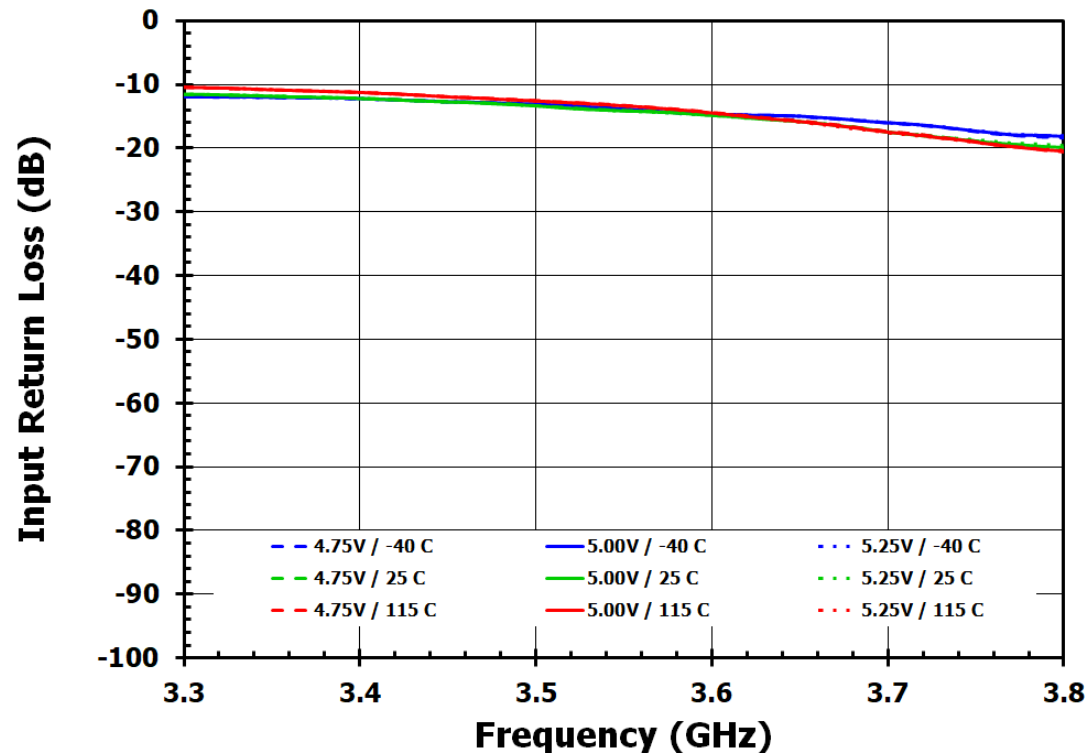


Gain at High Gain Setting

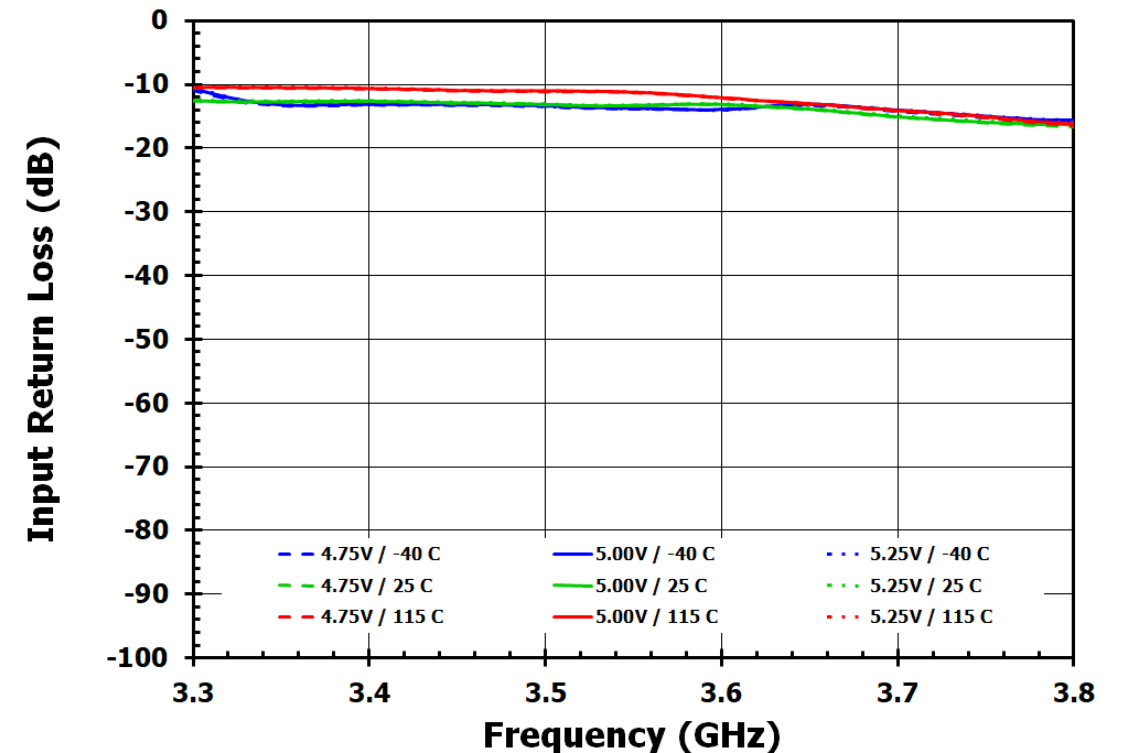


S-PARAMETERS (2 OF 4)

Input Return Loss at Low Gain Setting

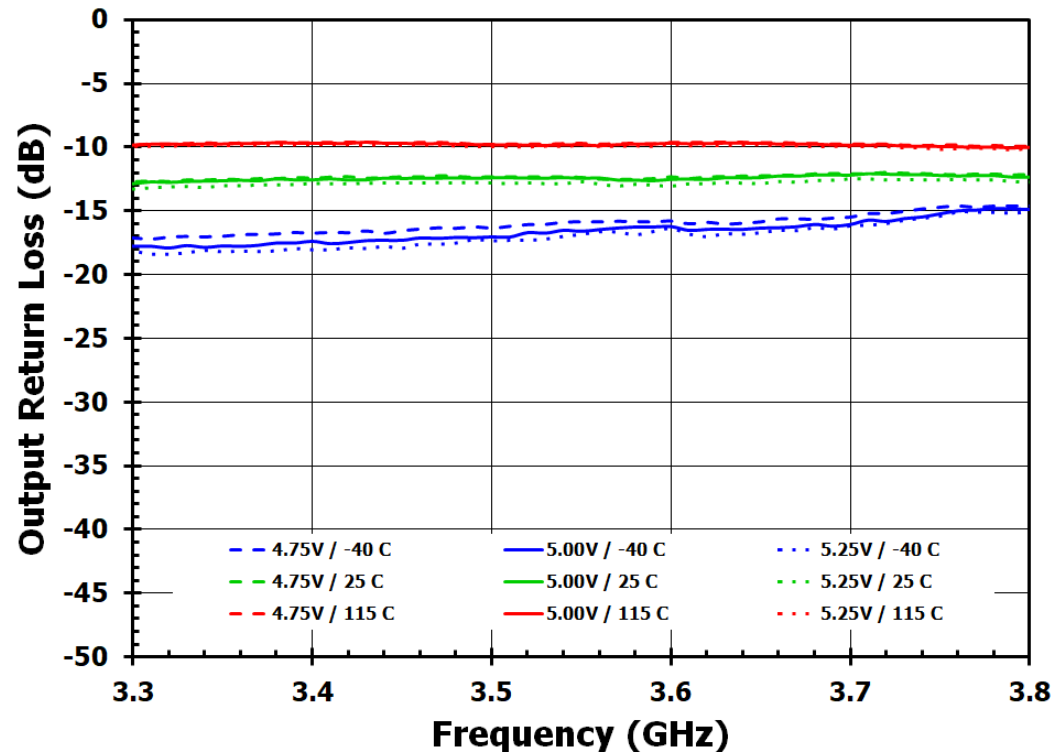


Input Return Loss at High Gain Setting

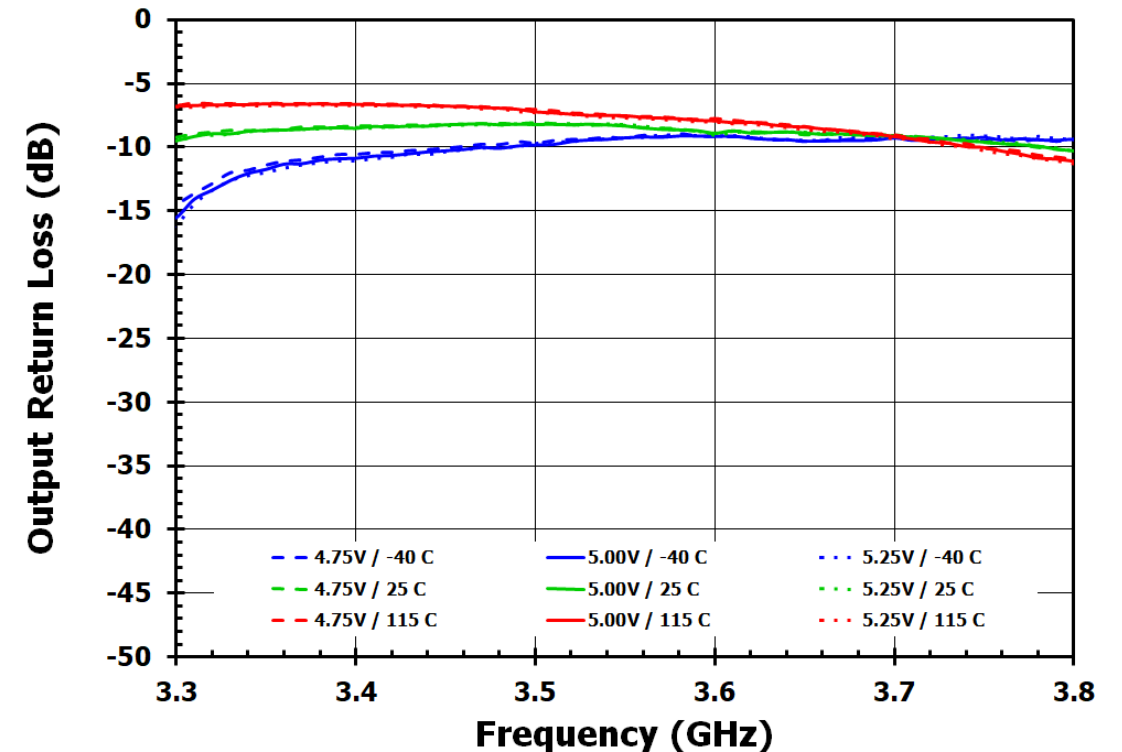


S-PARAMETERS (3 OF 4)

Output Return Loss at Low Gain Setting

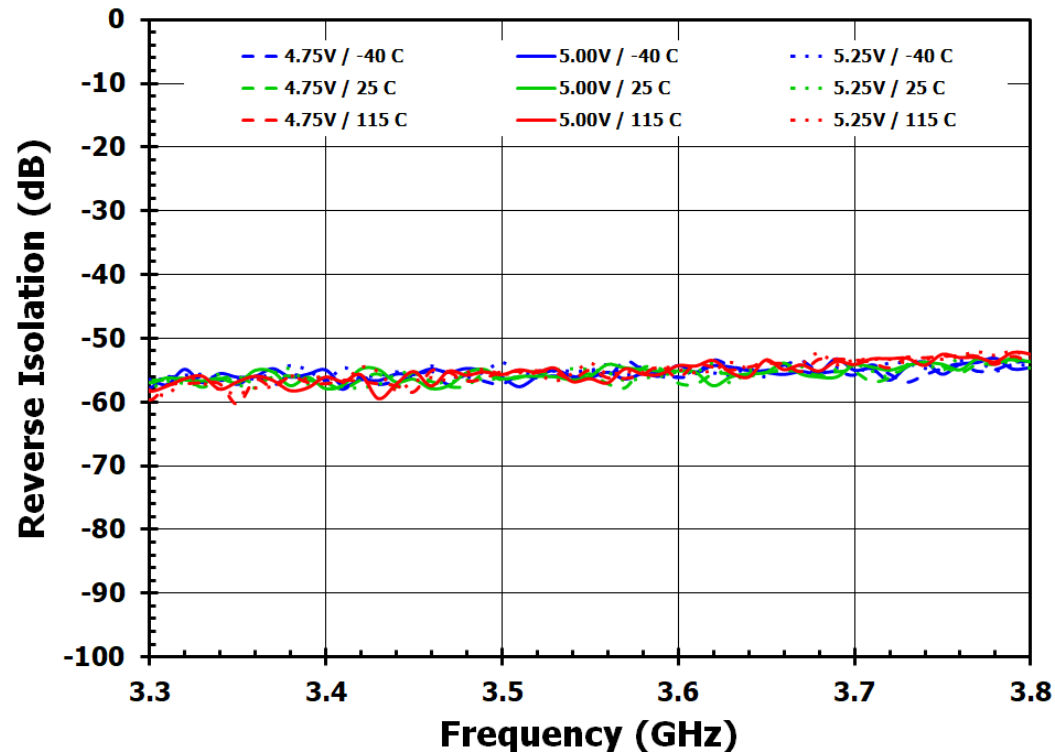


Output Return Loss at High Gain Setting

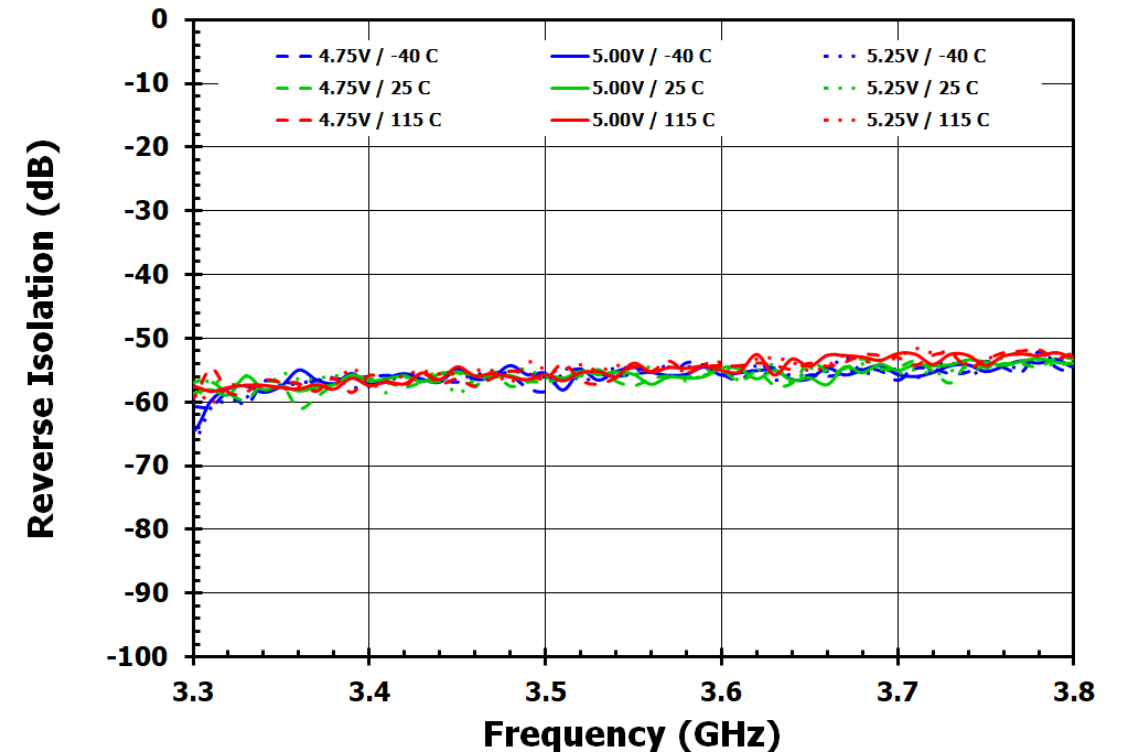


S-PARAMETERS (4 OF 4)

Reverse Isolation at Low Gain Setting

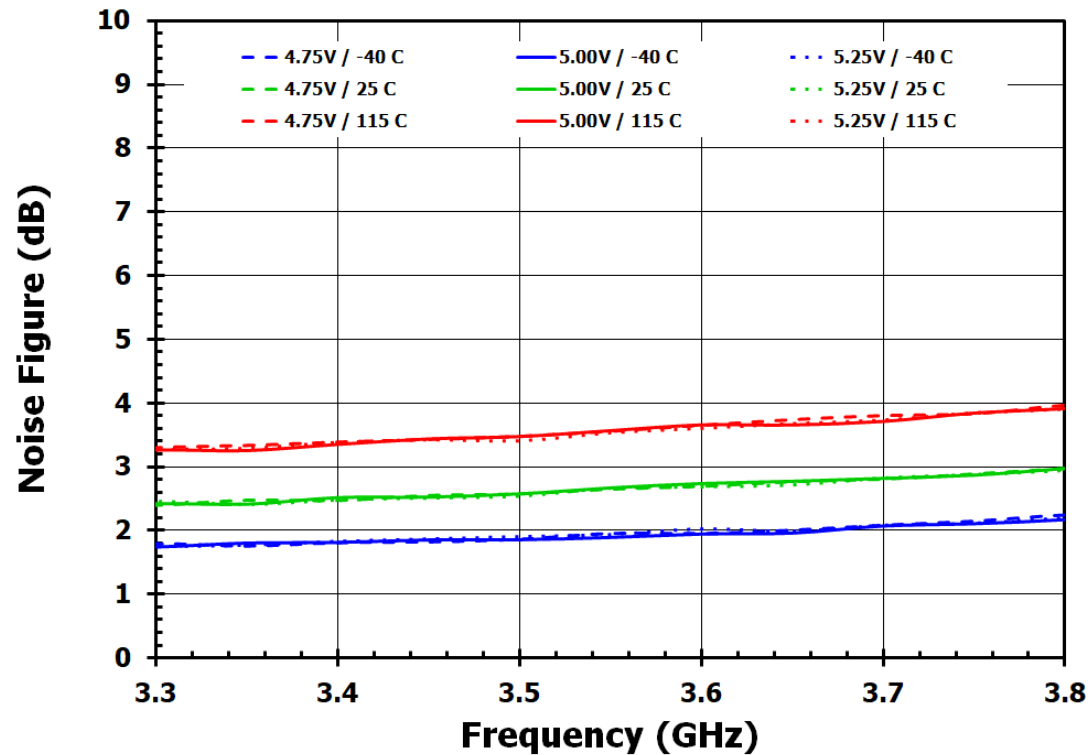


Reverse Isolation at High Gain Setting

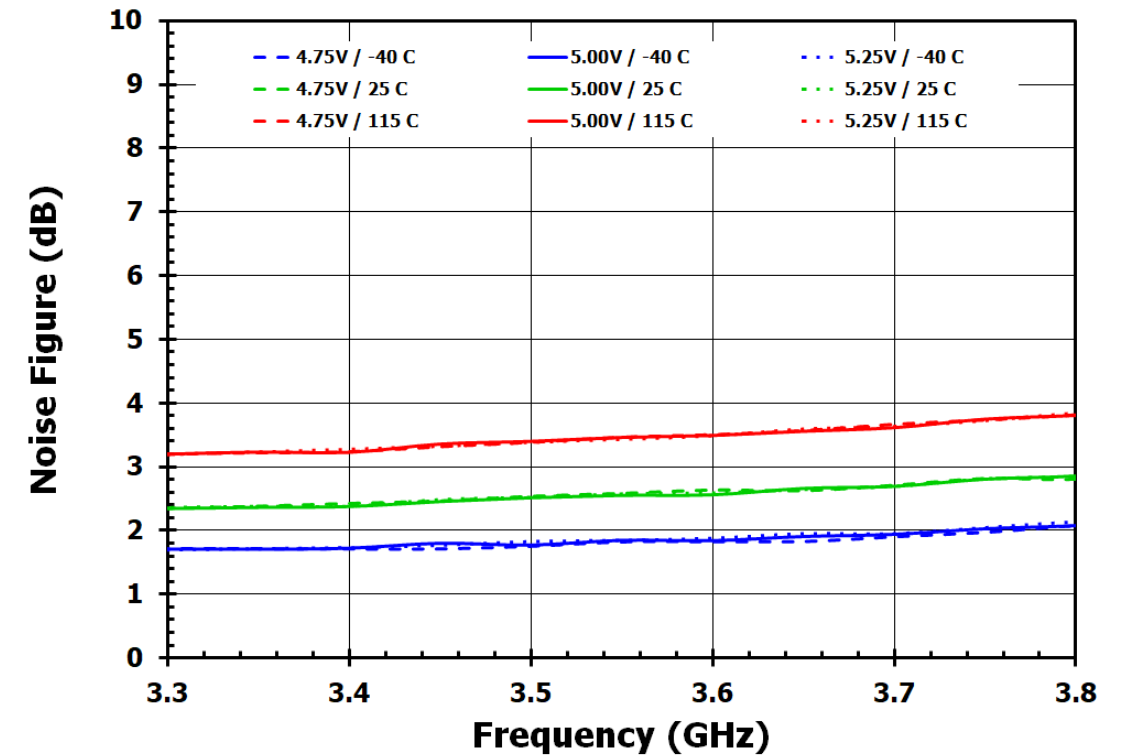


NOISE FIGURE

Noise Figure at Low Gain Setting

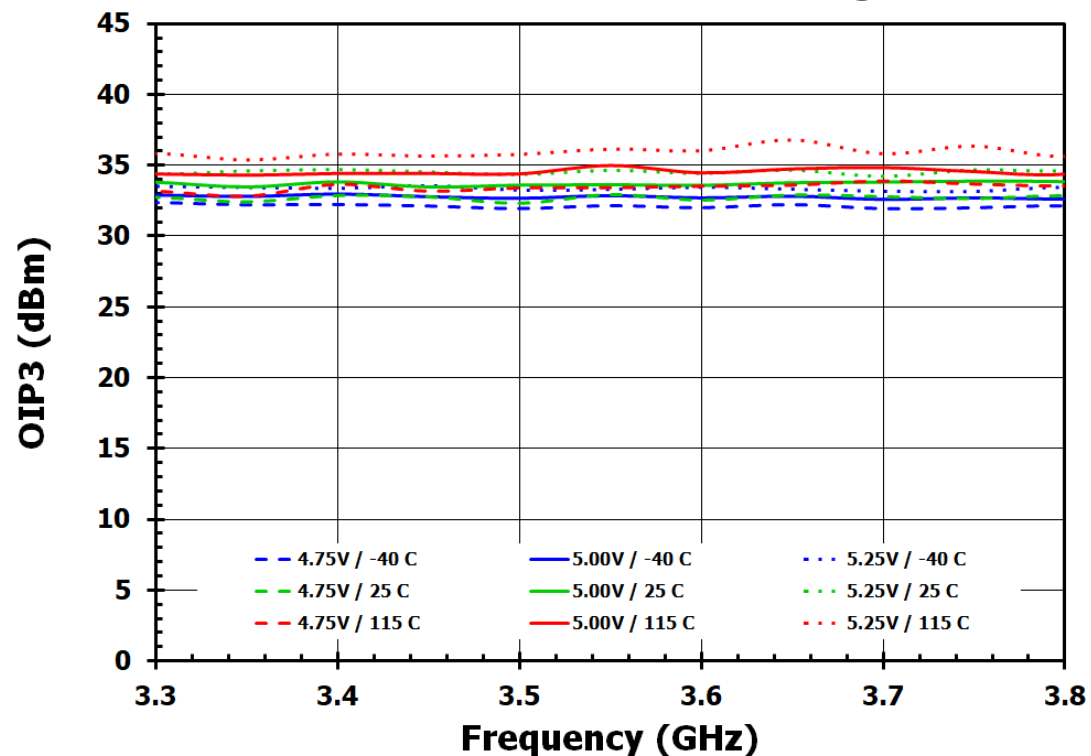


Noise Figure at High Gain Setting

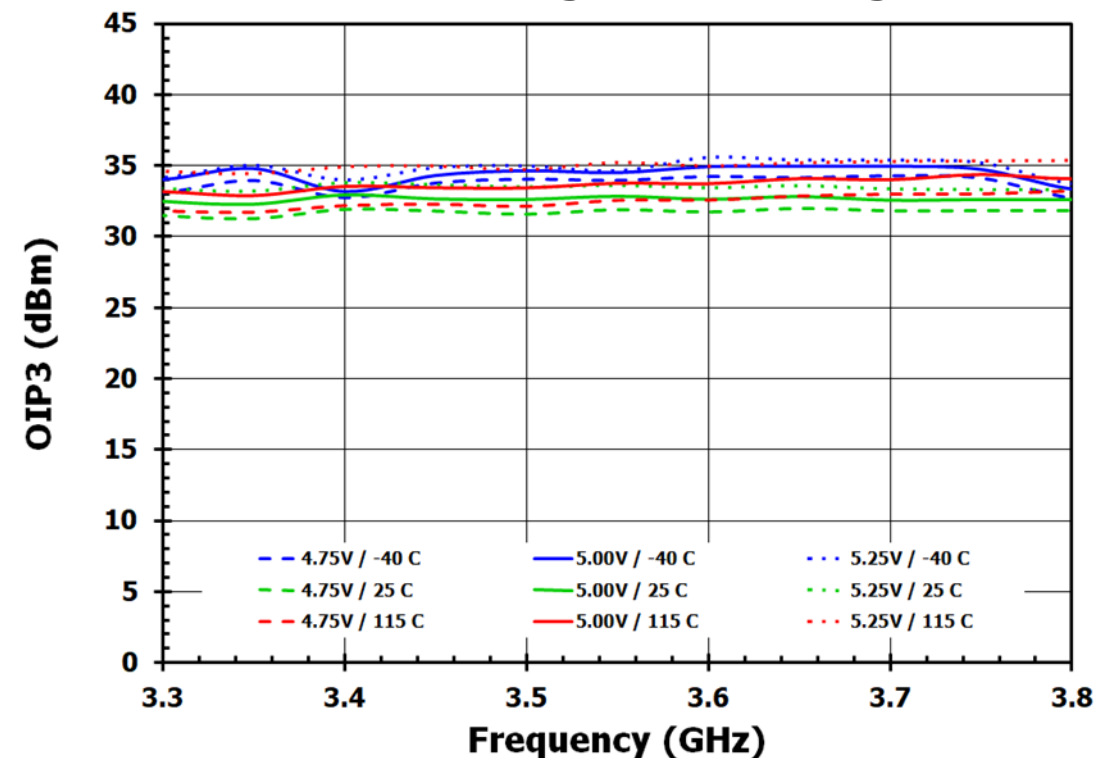


OIP3

OIP3 at Low Gain Setting

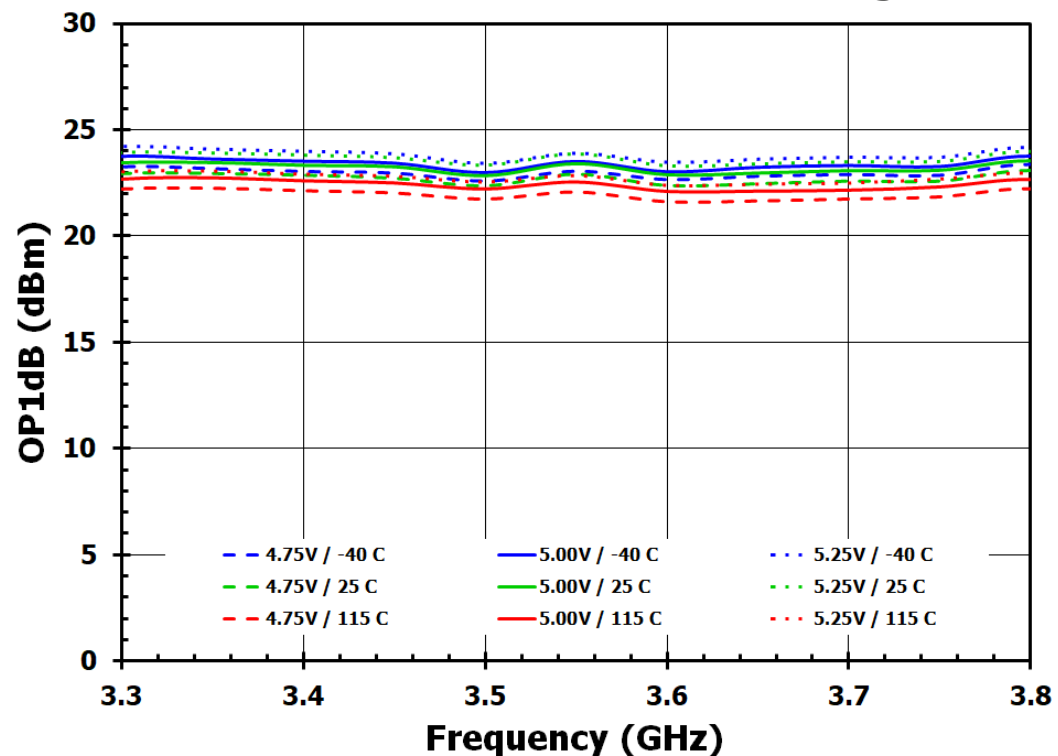


OIP3 at High Gain Setting

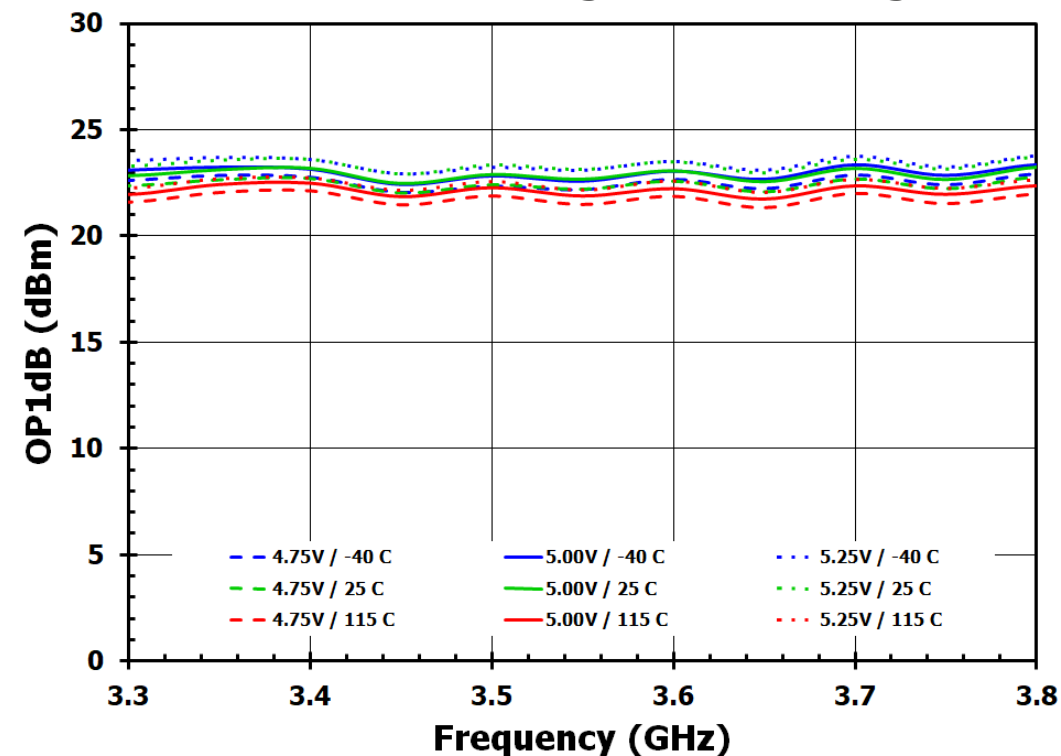


OP1dB

OP1dB at Low Gain Setting



OP1dB at High Gain Setting

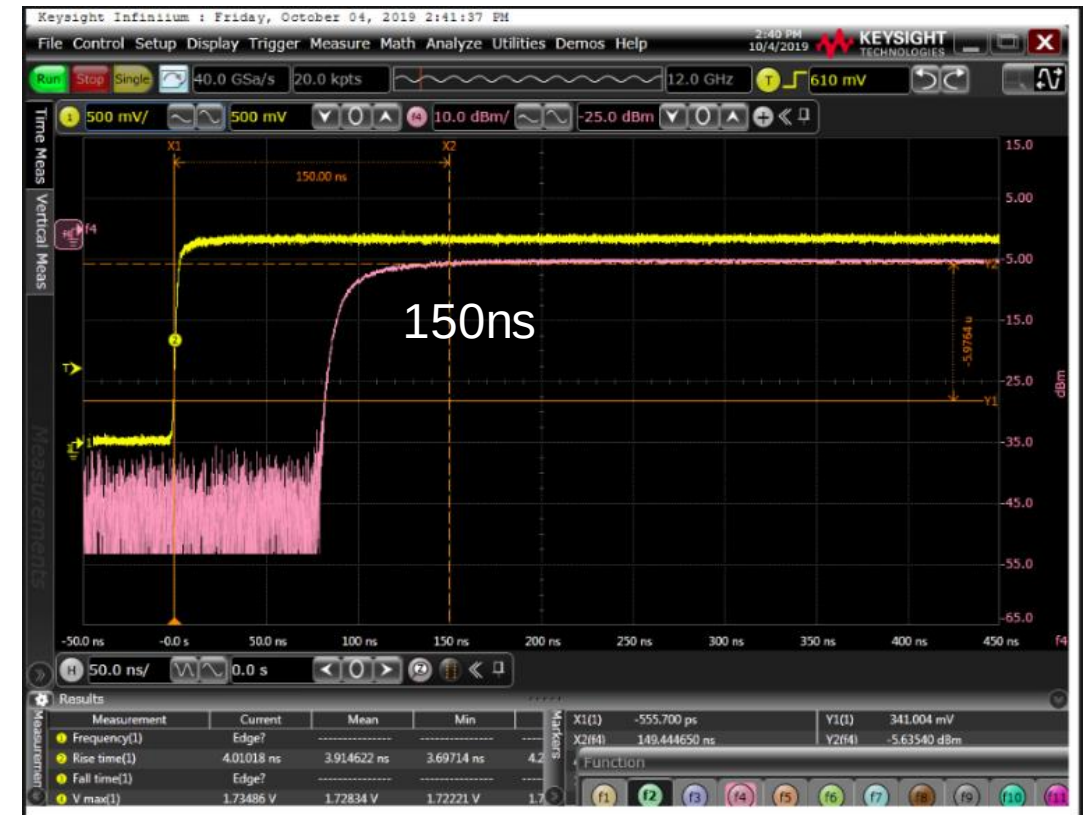


SWITCHING TIME

Power OFF time Low Gain Setting



Power ON time Low Gain Setting



CURRENT CONSUMPTION

Gain Setting	4.75V / -40C	5.00V / -40C	5.25V / -40C	4.75V / 25C	5.00V / 25C	5.25V / 25C	4.75V / 115C	5.00V / 115C	5.25V / 115C
Low Gain	80	88	96	68	74	80	65	69	74
High Gain	80	88	96	68	74	80	65	70	75

THANK YOU