

MASW-011170 S-parameters

Diode Applications



Part #: MASW-011170

File Format: S4P

Measurement Setup: On sample board. **De-embedding is required.**

Connections:

- Dut Board Connections
 - Port 1 = RFC
 - Port 2 = RF1
 - Port 3 = RF2
 - Port 4 = RF3
- RF1 is equivalent to RF5
- RF2 is equivalent to RF4

Files

- Measured MASW-011170 with board loss, RFC-RFx port in Insertion Loss, All other ports Isolation
 - Ex. “SN35_RFC-RF1_25C.S4P”
- THRU used for scaler de-embedding
 - Ex. “THRU_25C.S2P”
 - THRU cannot be used to correct for phase

Test Conditions

- Frequency: 10 MHz – 67 GHz
- Temperature: -40, 25, 85 °C,
- Power: -10 dBm

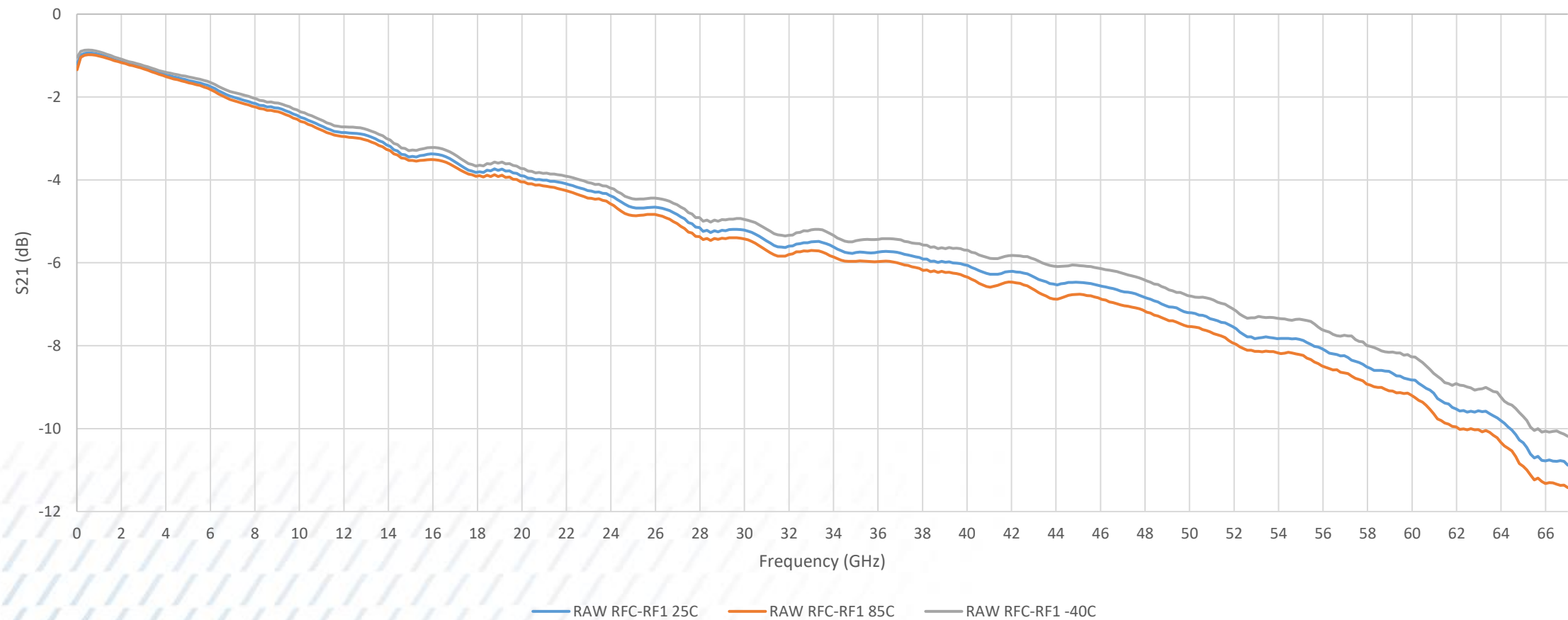
MASW-011170 S-parameters

MASW-011170 Insertion Loss with Board Loss

RFC-RF1



MASW-011170, RFC-RF1, Insertion Loss w/ Board Loss

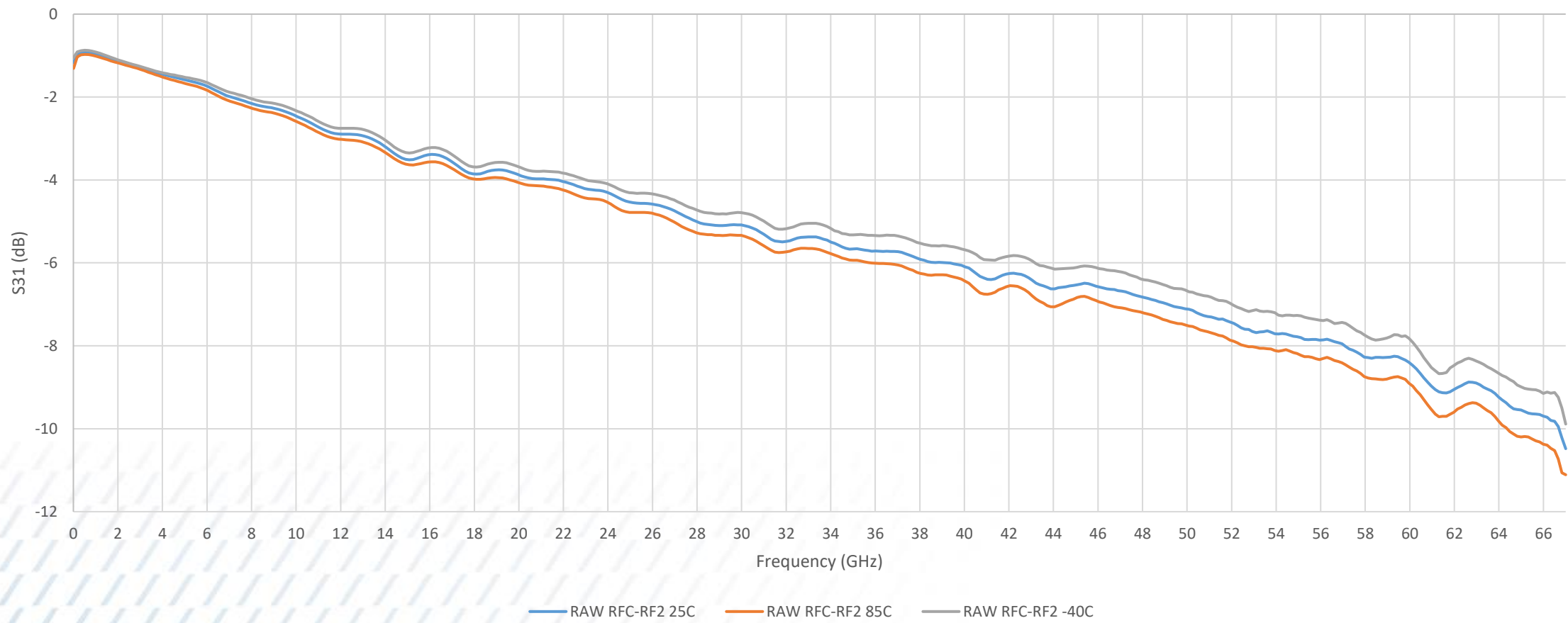


MASW-011170 Insertion Loss with Board Loss

RFC-RF2



MASW-011170, RFC-RF2, Insertion Loss w/ Board Loss

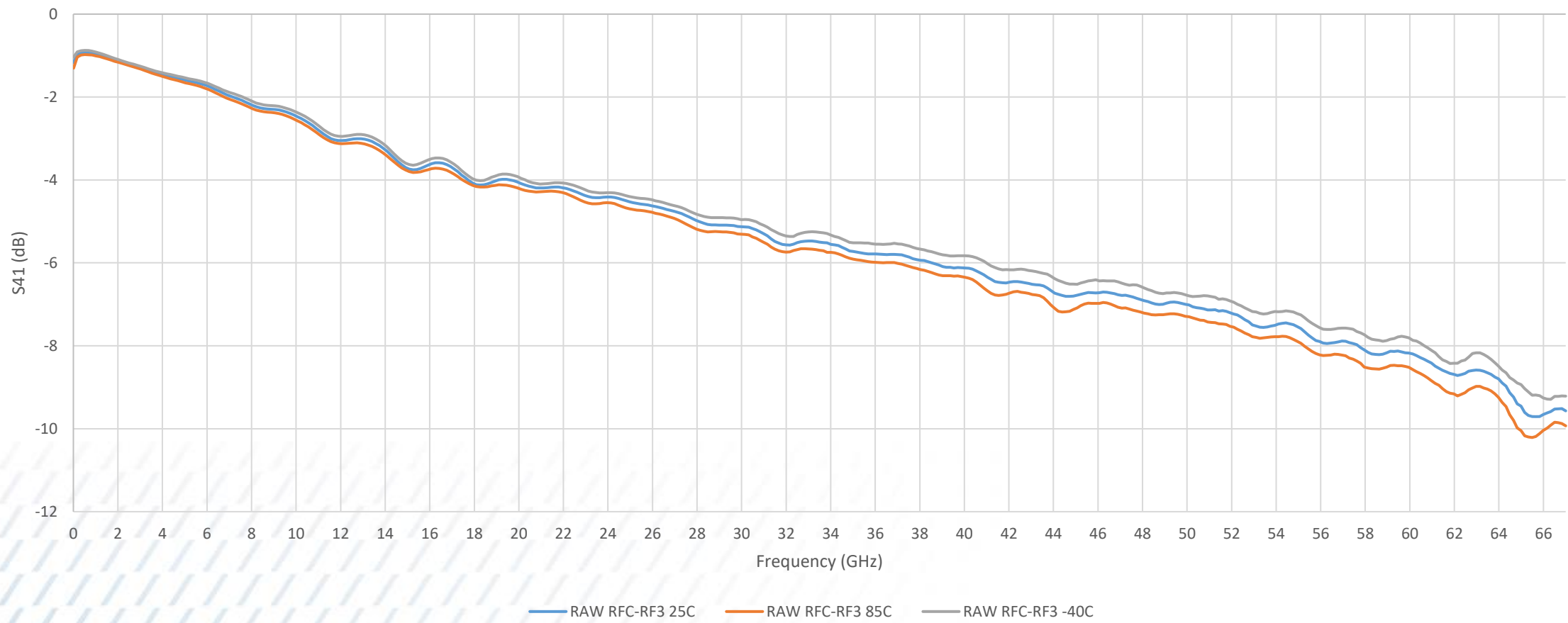


MASW-011170 Insertion Loss with Board Loss

RFC-RF3



MASW-011170, RFC-RF3, Insertion Loss w/ Board Loss

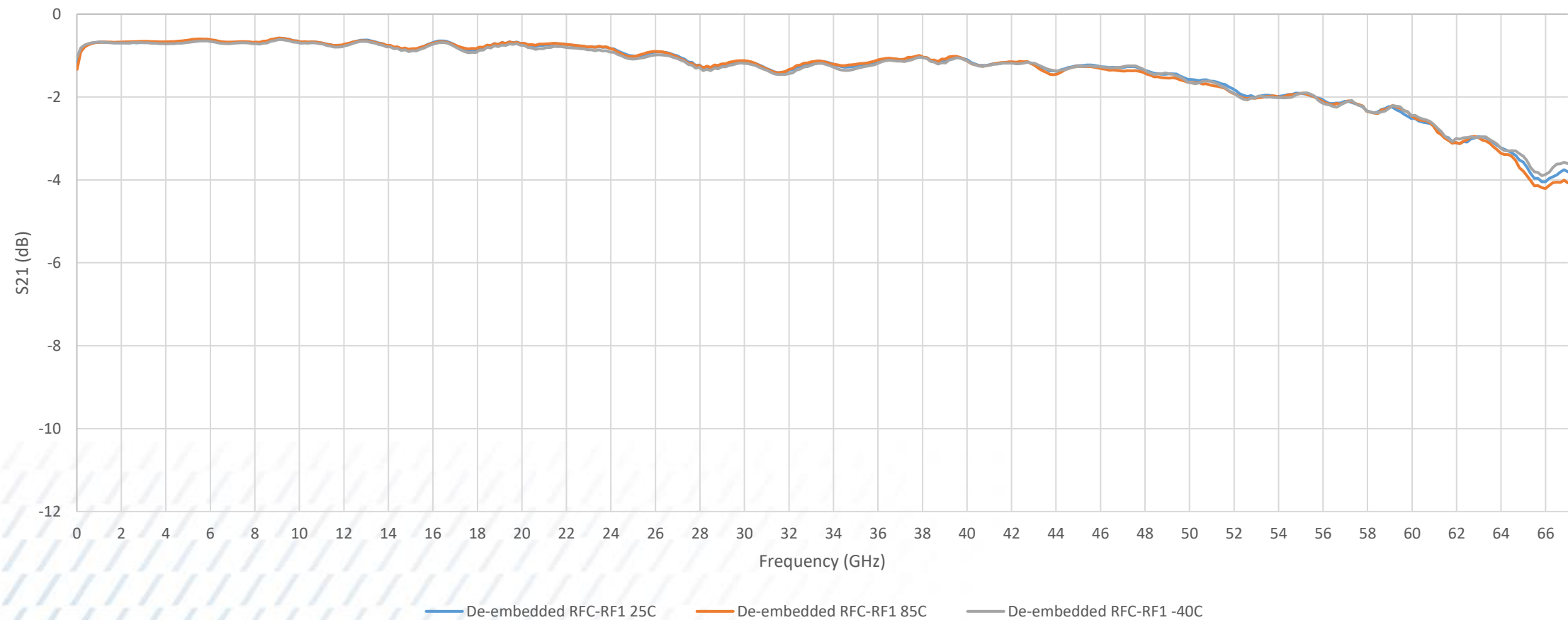


MASW-011170 Insertion Loss De-embedded

RFC-RF1, S21 Measured DUT Loss – THRU Loss



MASW-011170, RFC-RF1, De-embedded Insertion Loss

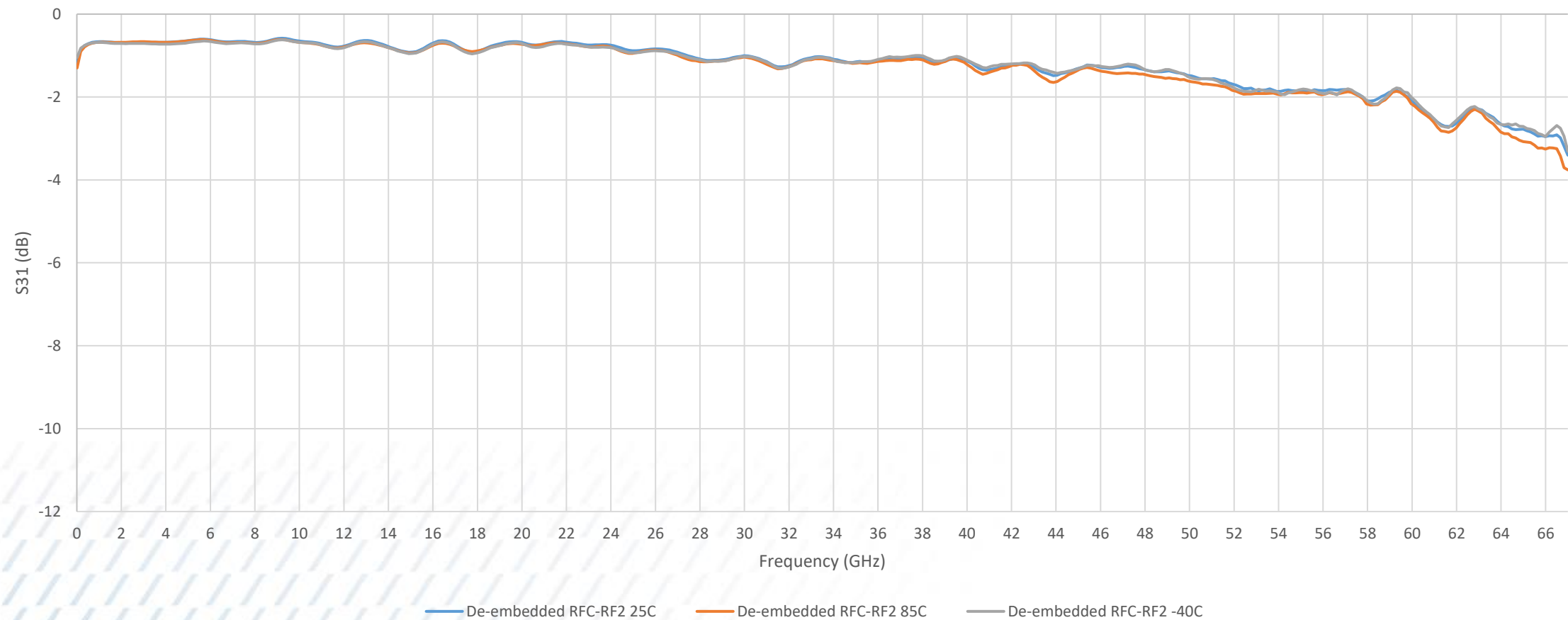


MASW-011170 Insertion Loss De-embedded

RFC-RF2, S31 Measured DUT Loss – THRU Loss



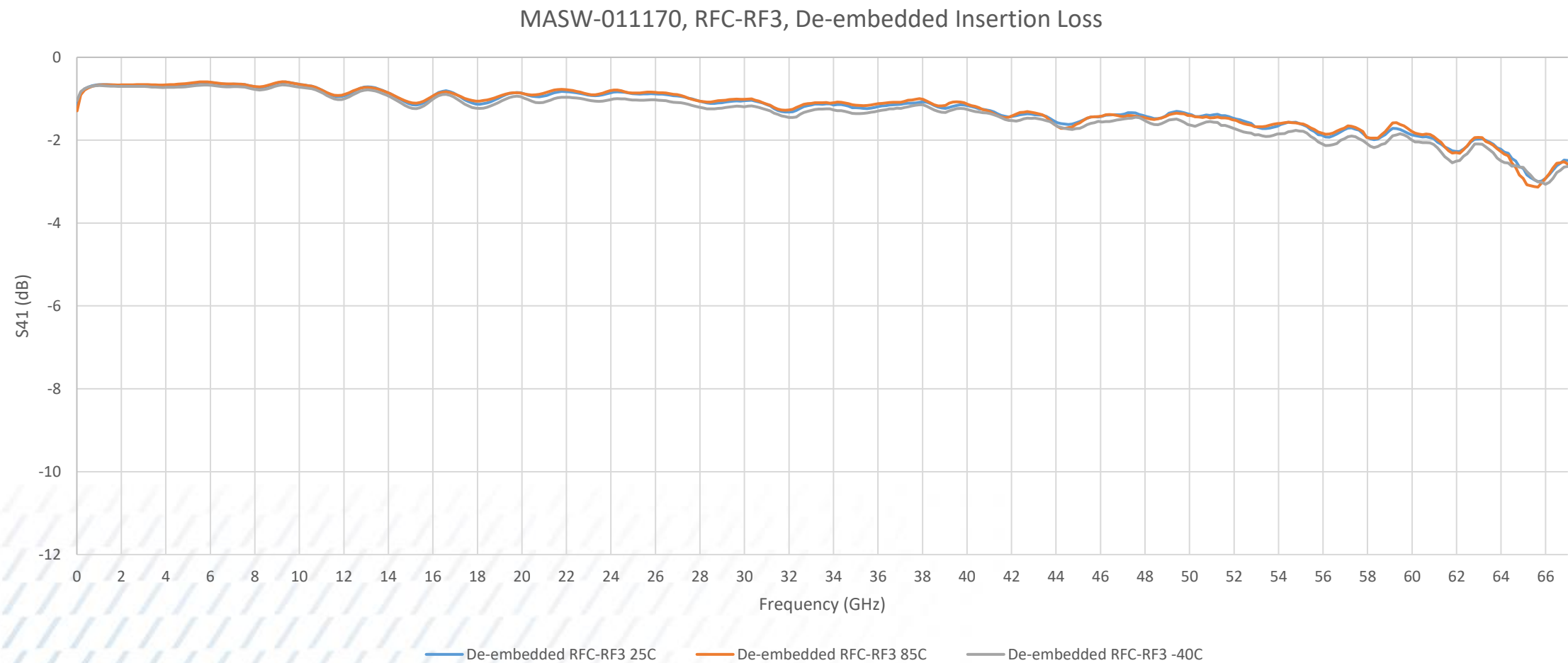
MASW-011170, RFC-RF2, De-embedded Insertion Loss



MASW-011170 Insertion Loss De-embedded



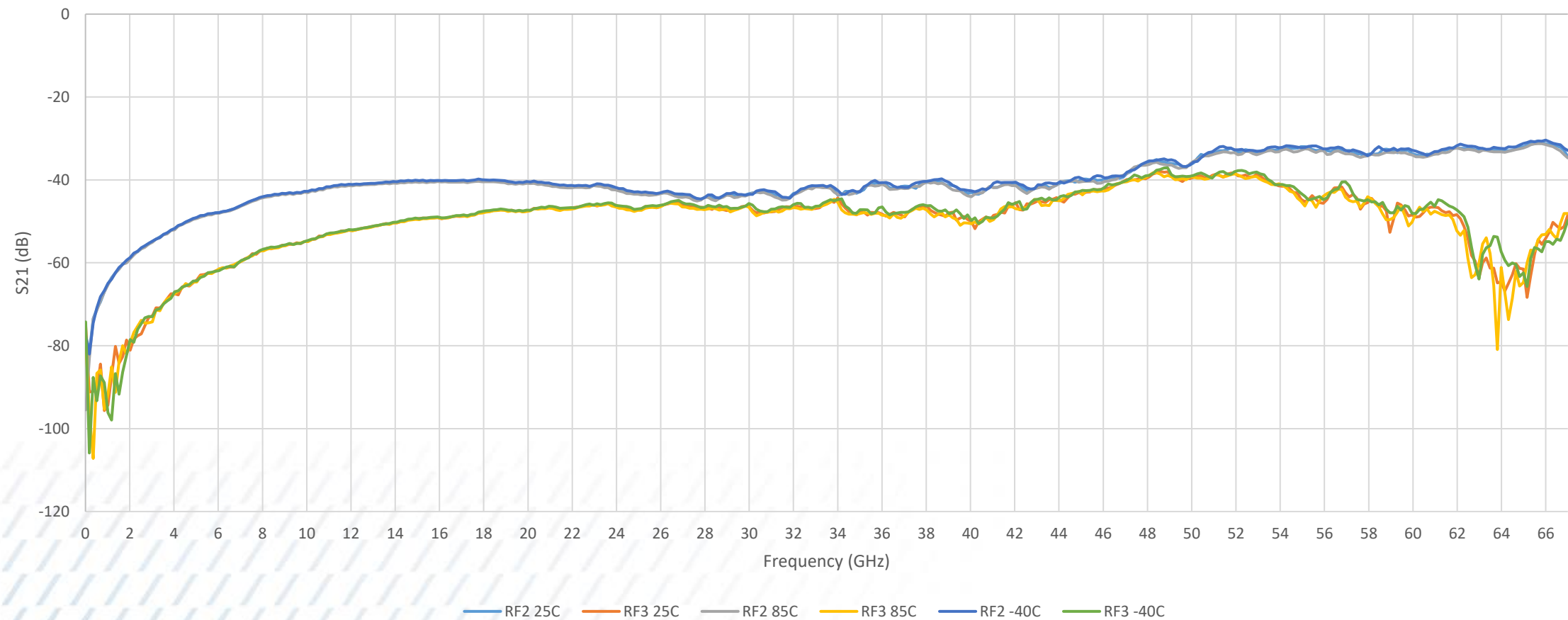
RFC-RF3, S41 Measured DUT Loss – THRU Loss



MASW-011170, RF2 and RF3 Isolation (RF1 On)



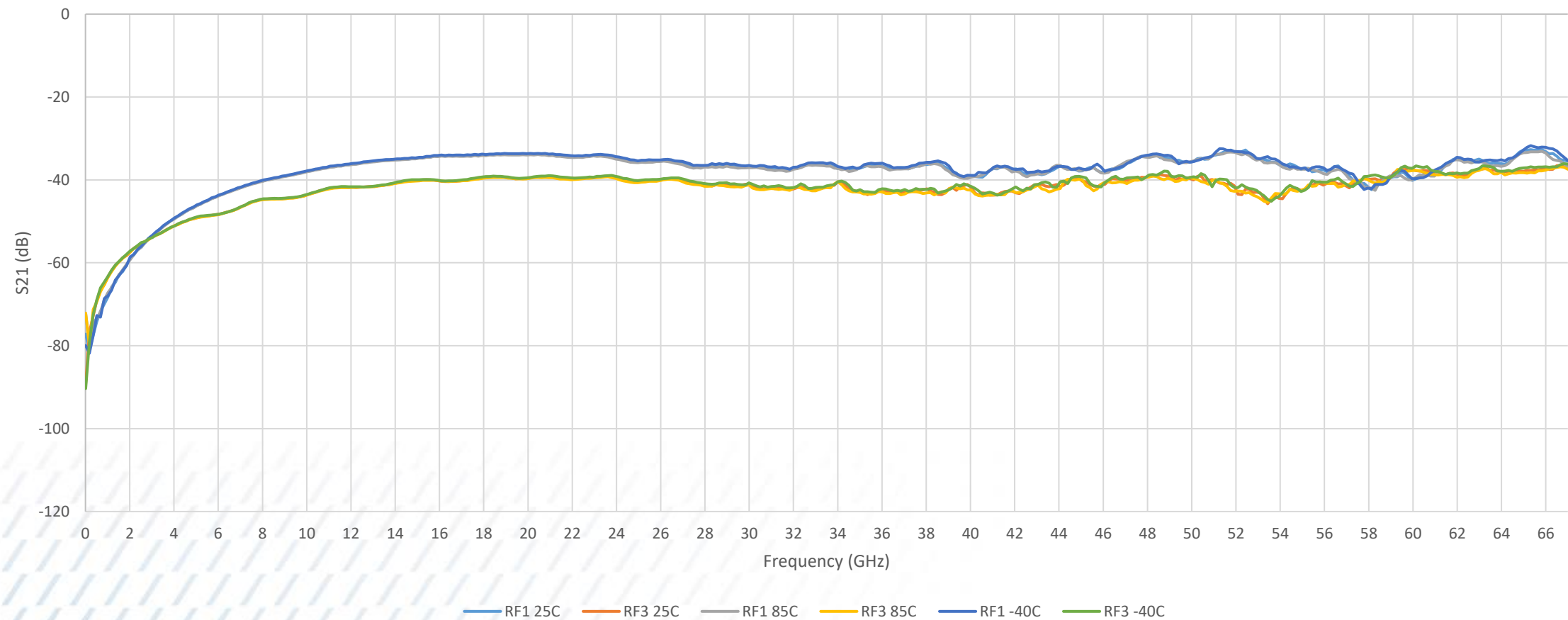
MASW-011170, (RF1 On) Isolation



MASW-011170, RF1 and RF3 Isolation (RF2 On)



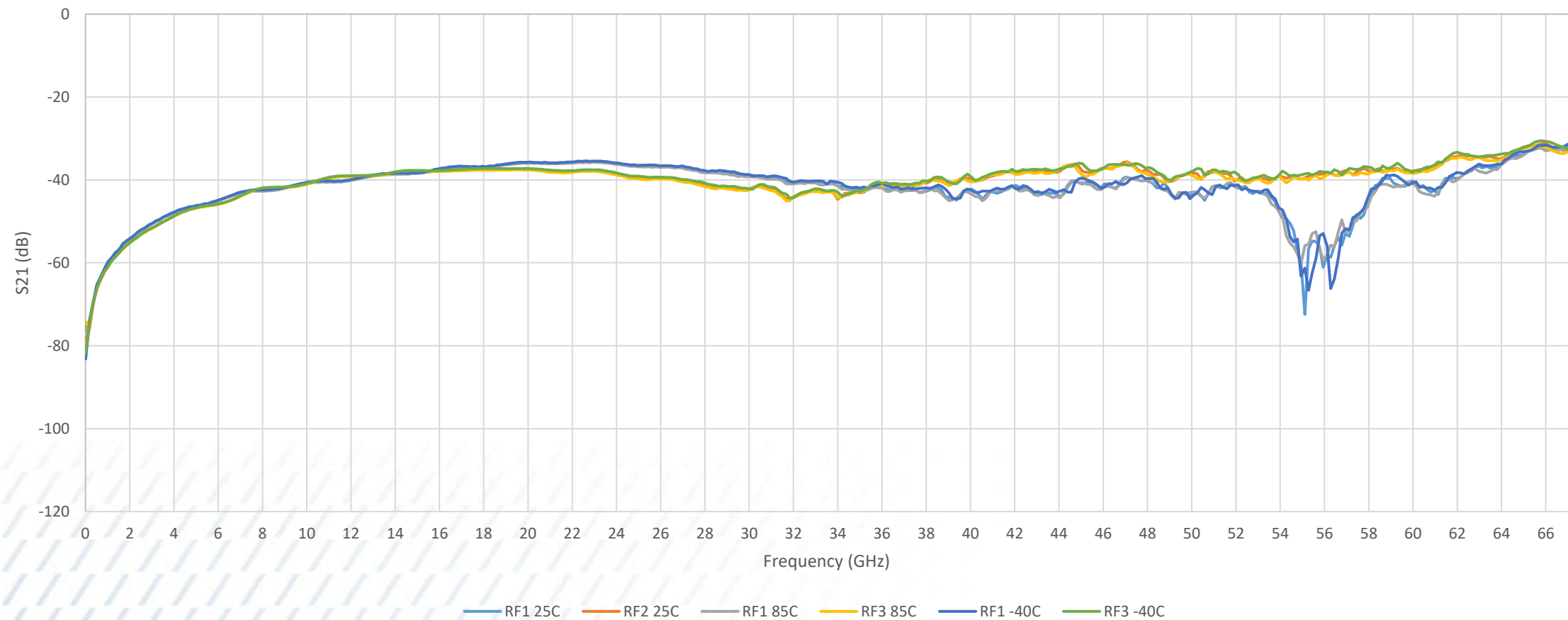
MASW-011170, (RF2 On) Isolation



MASW-011170, RF1 and RF2 Isolation (RF3 On)



MASW-011170, (RF2 On) Isolation

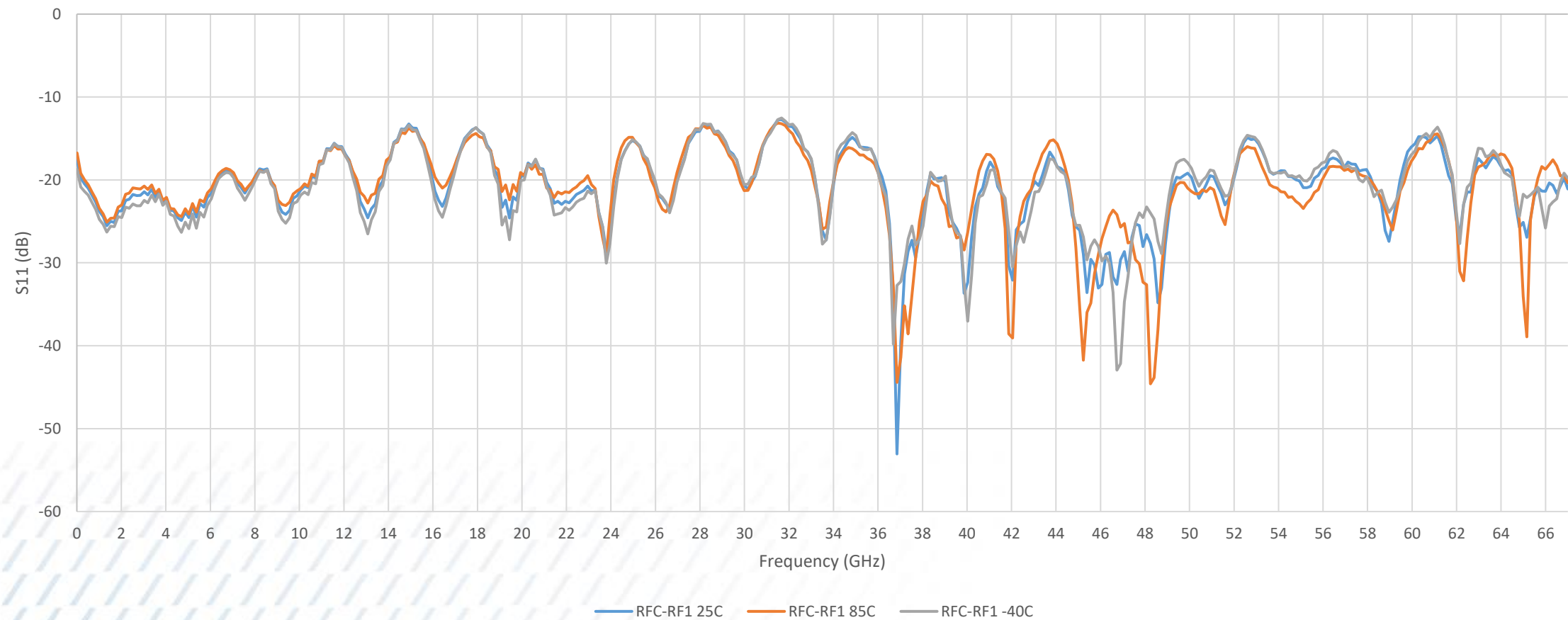


MASW-011170 Input Return Loss

RFC-RF1



MASW-011170, Input Return Loss, RFC-RF1

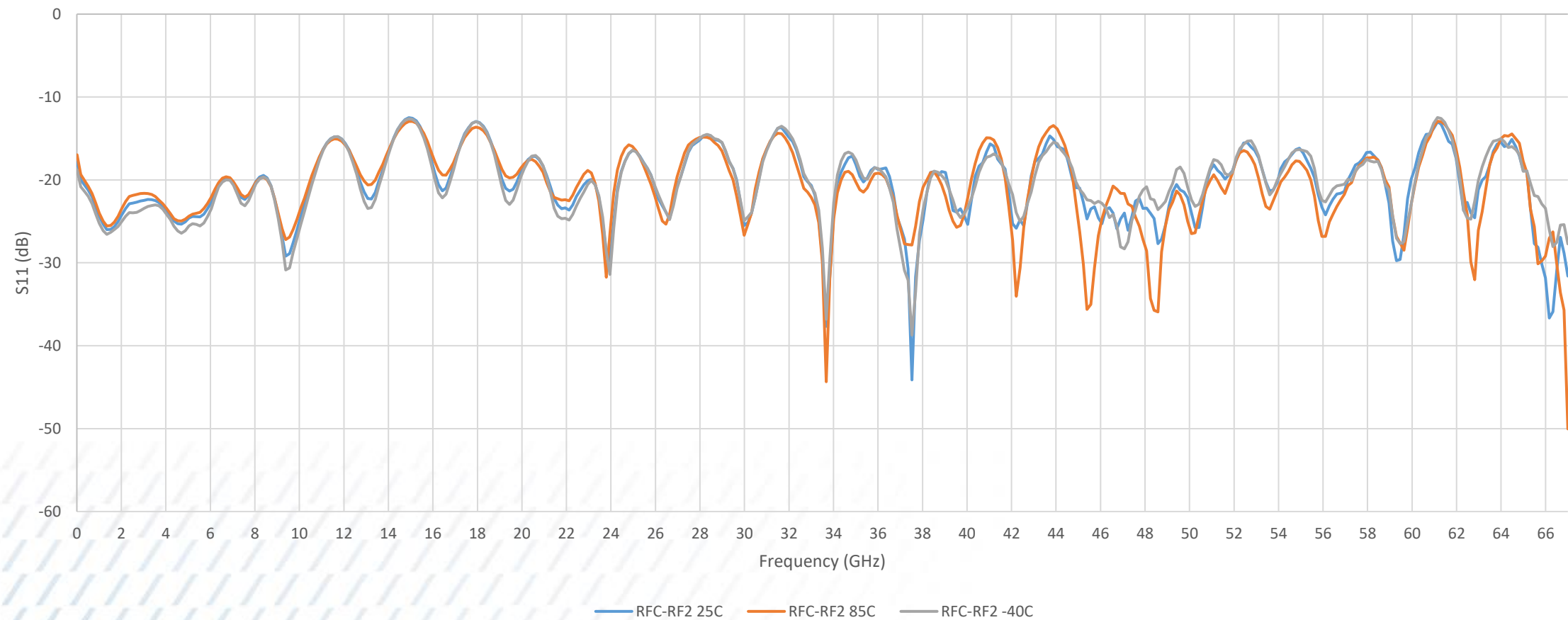


MASW-011170 Input Return Loss

RFC-RF2



MASW-011170, Input Return Loss, RFC-RF2

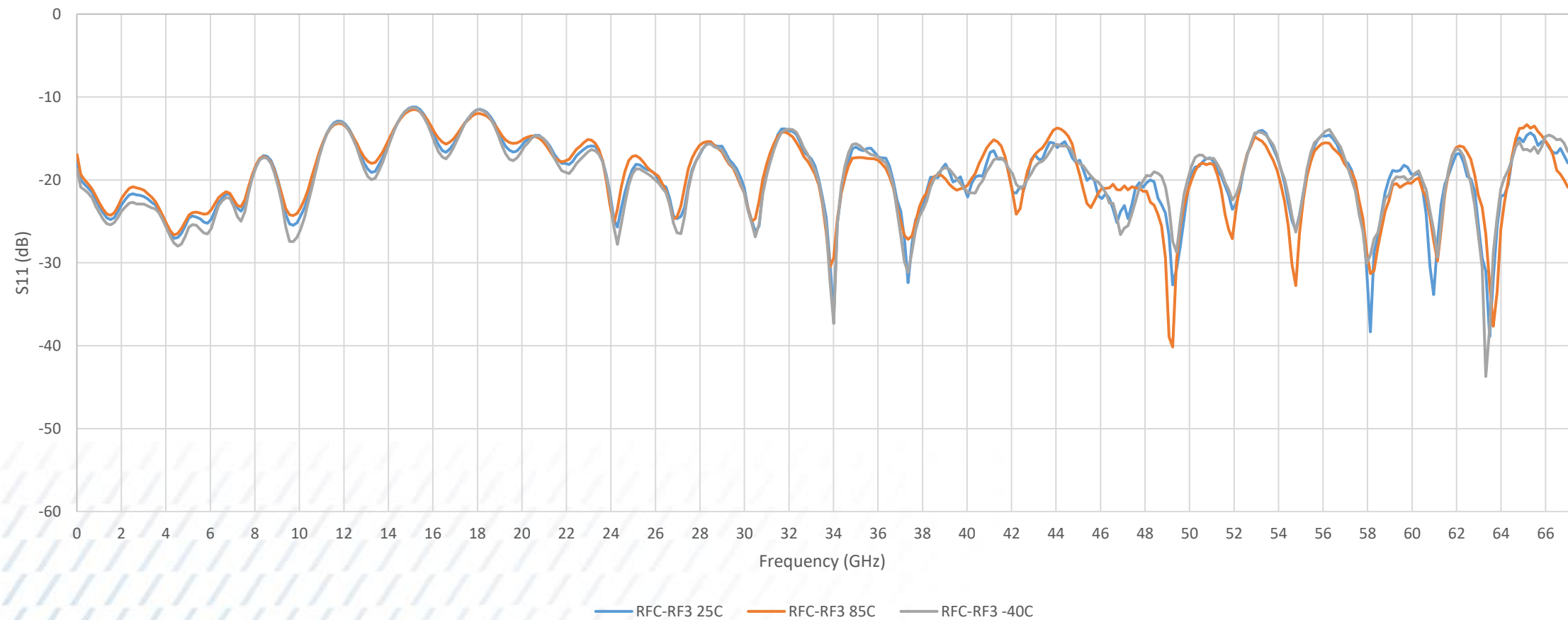


MASW-011170 Input Return Loss

RFC-RF3



MASW-011170, Input Return Loss, RFC-RF3

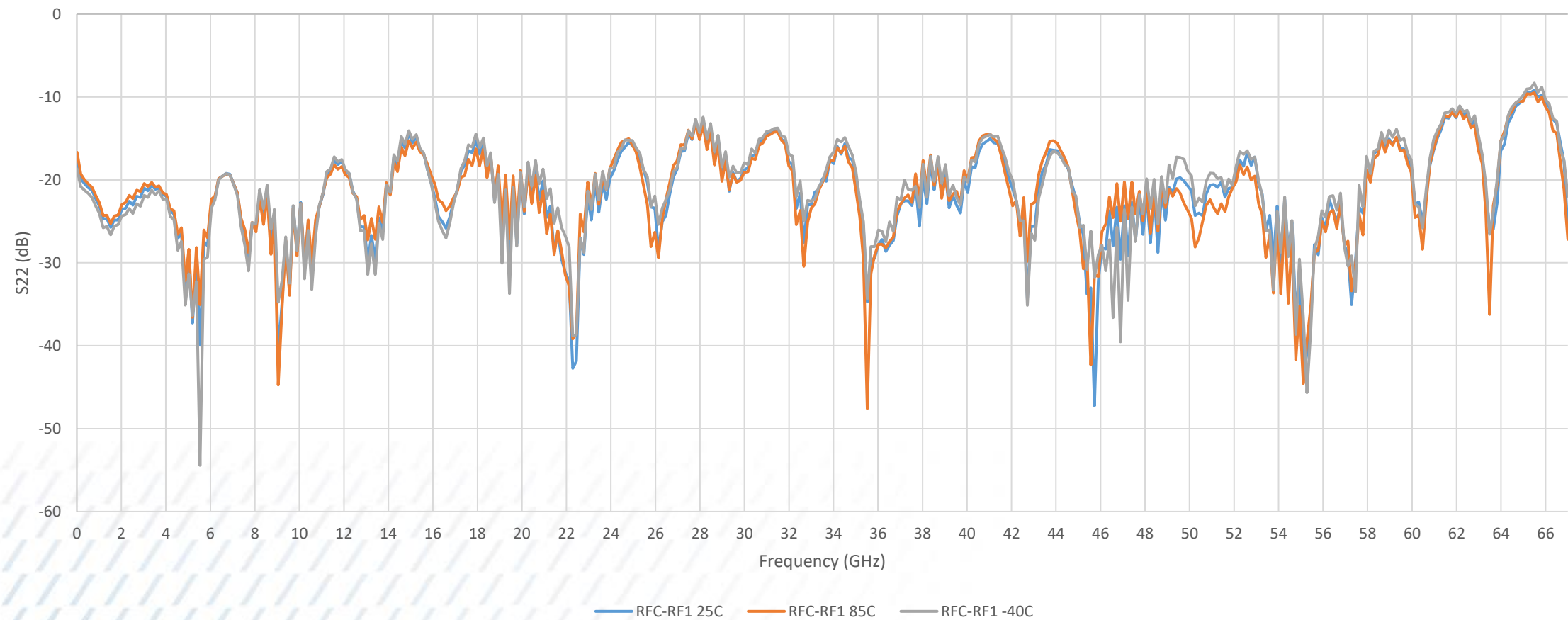


MASW-011170 Output Return Loss

RFC-RF1



MASW-011170, Output Return Loss, RFC-RF1

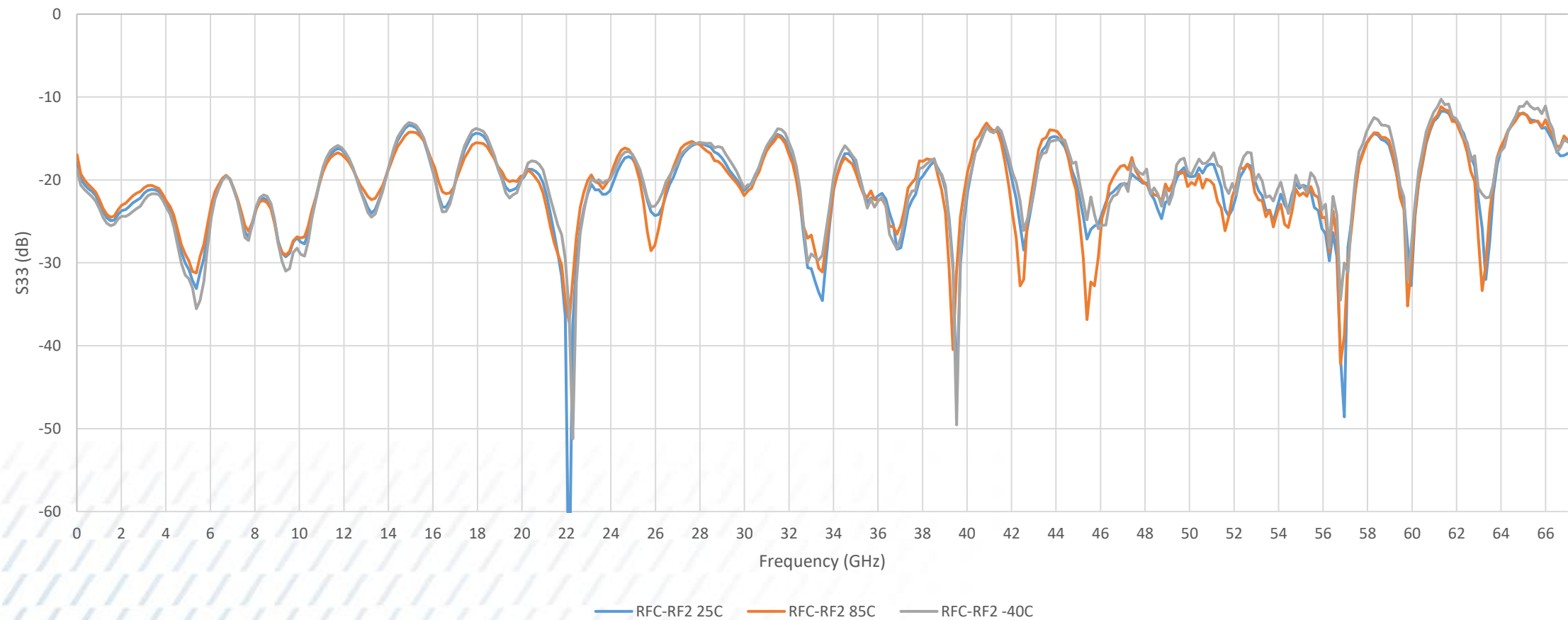


MASW-011170 Output Return Loss

RFC-RF2



MASW-011170, Output Return Loss, RFC-RF2

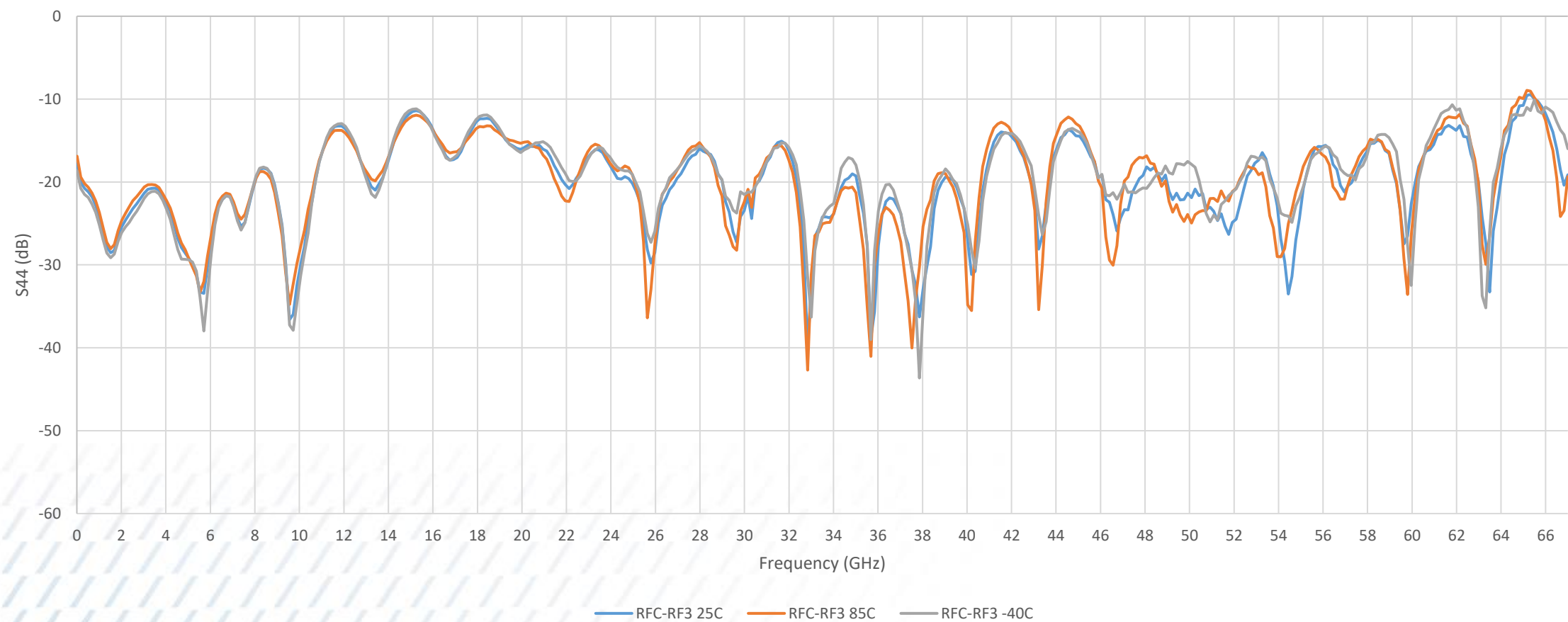


MASW-011170 Output Return Loss

RFC-RF3



MASW-011170, Output Return Loss, RFC-RF3

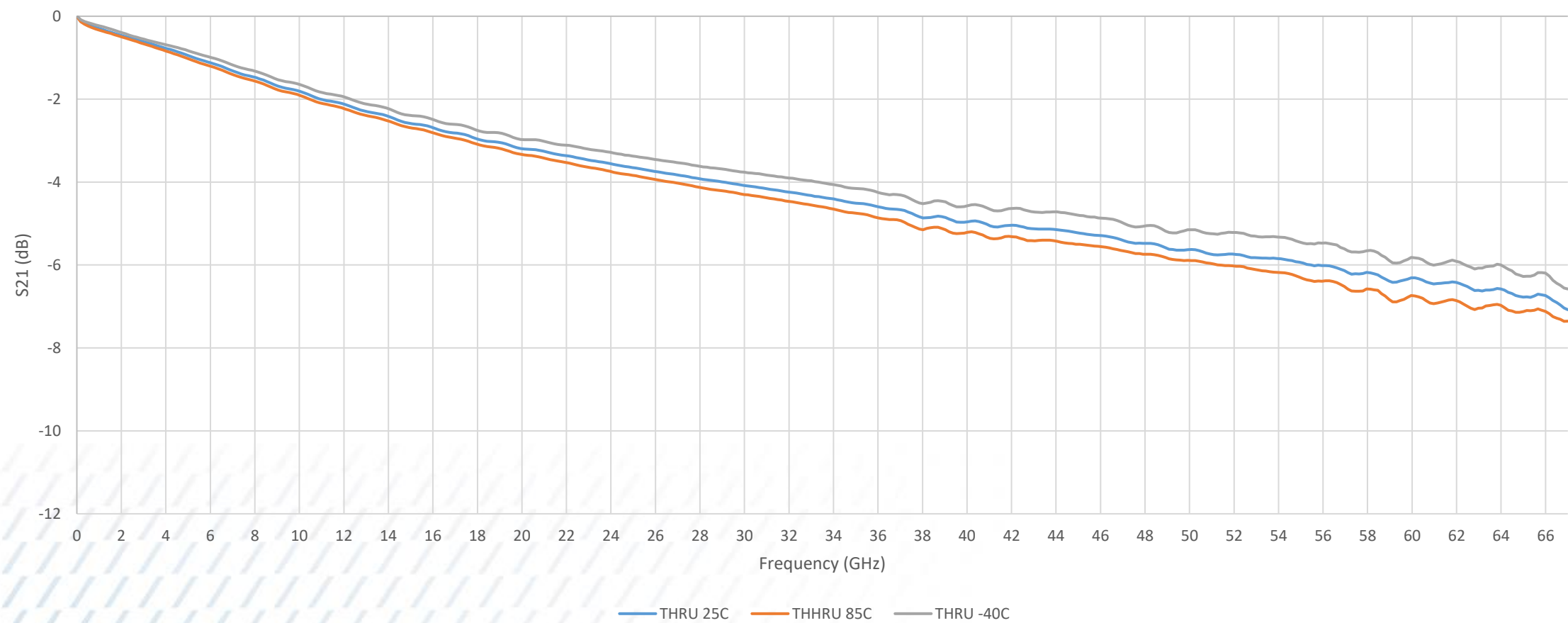


THRU S-parameters

THRU Insertion Loss



MASW-011170 THRU Board, Insertion Loss



THRU Board, Insertion Loss

