

SiNx Films by PECVD#2 (Advanced Vacuum)

| Pressure (mT) | LF (187kHz; 80W) Duration Time (s) | HF (13.56MHz;30W) Duration Time (s) | Gas Flow-rate (sccm) | | | Deposition Time (s) | Deposition Thickness (Å) | Deposition Rate (Å/m) | Refractive Index | Average Stress (MPa) | Standard Deviation (MPa) |
|---------------|------------------------------------|-------------------------------------|----------------------|------|-----|---------------------|--------------------------|-----------------------|------------------|----------------------|--------------------------|
| | | | SiH4 (2% in He) | NH3 | N2 | | | | | | |
| 800 | 0.5 | 6 | 1000 | 16 | 980 | 1749 | 2398 | 82 | 1.974 | 281 | na |
| 800 | 1 | 6 | 1040 | 18 | 980 | 1800 | 2397 | 80 | 1.98 | 112 | 27 |
| 800 | 1.5 | 6 | 1040 | 18 | 980 | 1929 | 2596 | 81 | 1.962 | -113 | 15 |
| 800 | 1.25 | 6 | 1040 | 18 | 980 | 1800 | 2414 | 80 | 1.964 | -62 | 14 |
| 800 | 0 | HF only | 1040 | 17 | 980 | 1535 | 2225 | 87 | 2.003 | 454 | 19 |
| 800 | LF only | 0 | 1040 | 5 | 980 | 1940 | 2448 | 76 | 1.984 | -2010 | 134 |
| 800 | 2 | 6 | 1040 | 14.4 | 980 | 1705 | 2245 | 79 | 1.979 | -315 | 69 |
| 800 | 1.66 | 6 | 1040 | 16 | 980 | 2100 | 2835 | 81 | 1.967 | -257 | 186 |
| 800 | 4.031 | 6 | 900 | 10 | 980 | 1800 | 2377 | 79 | 1.972 | -677 | 26 |
| 800 | 6 | 6 | 900 | 10 | 980 | 2100 | 2289 | 65 | 1.973 | -659 | 64 |
| 800 | 6 | 4 | 900 | 10 | 980 | 1800 | 2301 | 77 | 1.963 | -1100 | 36 |
| 800 | 1.2 | 8.8 | 1040 | 15 | 980 | 1800 | 2218 | 74 | 2.005 | 259 | 37 |
| 800 | 1.6 | 6 | 1040 | 14 | 980 | 2100 | 2384 | 68 | 1.996 | 51 | 79 |
| 800 | 2.512 | 5.088 | 1040 | 14 | 980 | 2100 | 2472 | 71 | 1.974 | -457 | 69 |
| 800 | 2.056 | 5.544 | 1040 | 14 | 980 | 2100 | 2620 | 75 | 1.976 | -386 | 86 |
| 800 | 1.828 | 5.772 | 1040 | 14 | 980 | 2100 | 2320 | 66 | 2.007 | 74.82 | 81 |
| 800 | 1.942 | 5.658 | 1040 | 14 | 980 | 2100 | 2318 | 66 | 2.003 | -4.77 | 80 |
| 800 | 2 | 5.6 | 1040 | 14 | 980 | 2100 | 2635 | 75 | 1.978 | -350 | 98 |
| 800 | 1.971 | 5.629 | 1040 | 14 | 980 | 2100 | 2535 | 72 | 1.984 | -303.71 | 98 |