Finding What You Need

Below are some guidelines as to how best to find a filter or coating that meets your specific need. The most significant characters in the SKU are the 2nd through 5th characters. These define the prominent wavelengths, whether a band center, edge, or some other feature.

The following characters define the general category of the product and fall between the 6th and 8th characters

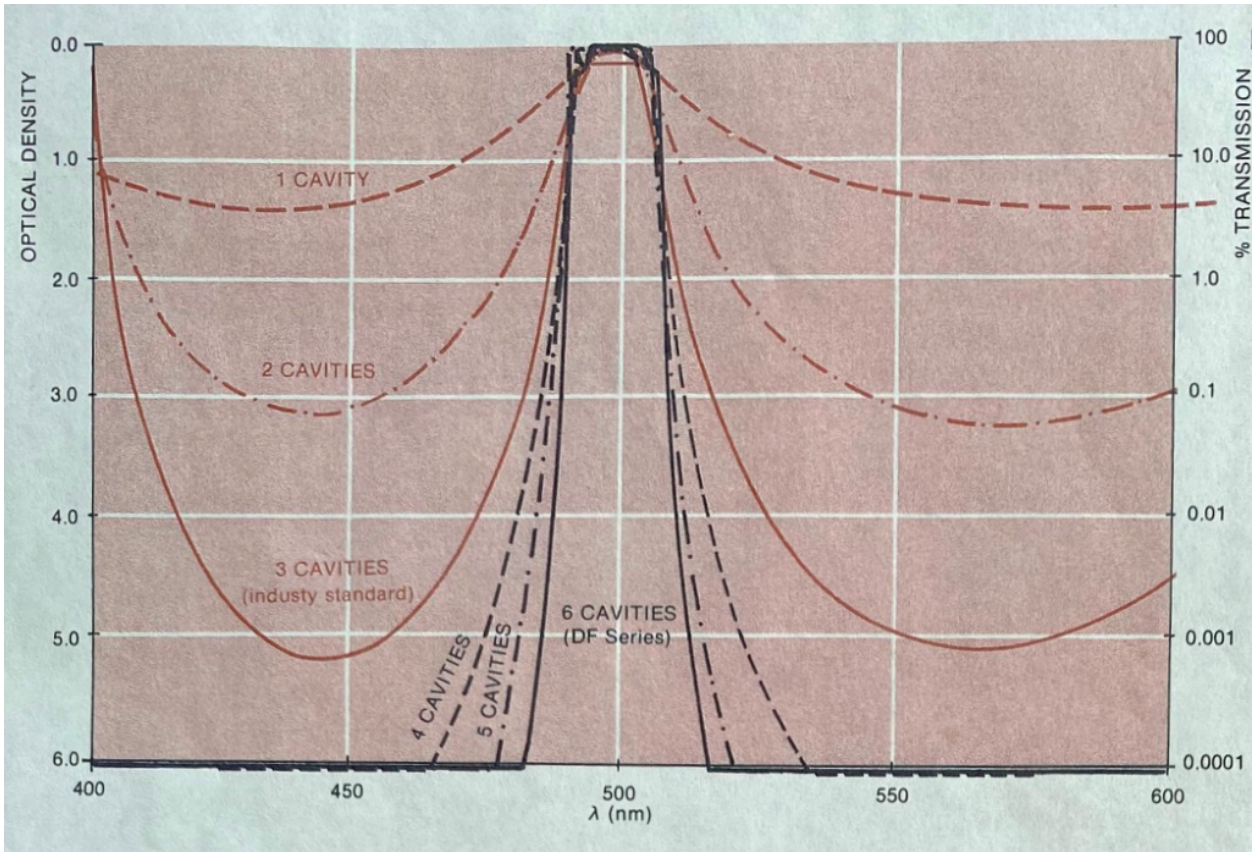
- NB is a band pass filter of two Fabry-Perot (FP) interfering cavities and the band shape will follow the performance detailed in Table 1, Column 2
    - These coatings are typically available from the UVB to NIR regions
    - Typical FWHM is 0.001 to 0.020 times the CWL
    - Typical out of band average attenuation is 4.0 OD
- SC is a band pass filter of a single FB cavity. These are typically very narrow passbands with shape characteristics in Table 1, Column 1
    - These coatings are typically available in the Vis to NIR
    - Typical FWHM is 0.0002 to 0.01 times the CWL
    - Typical out of band attenuation is OD 3.0 to 4.0
    - These filters are used with atomic line emission
- BP is a band pass filter of three interfering cavities. The band shape will be found in Table 1, Column 3
    - These coatings are typically available from the DUV to MIR,
    - Typical FWHM is 0.001 to 0.01 times the CWL
    - Typical out of band blocking is OD 4.0 to 5.0
    - These filters are the most common category
- WB is a band pass of 5 interfering cavities. The band shape is defined in Table 1, Column 5
    - These coatings are typically available from the DUV to MIR,
    - Typical FWHM is 0.001 to 0.01 times the CWL,
    - Typical out of band blocking is OD 4.0 to 5.0

    - These filters are the most common category
- DF is a band pass of 6 or more interfering cavities and has a shape defined in Table 1, Column 6
    - These coatings are available in the vis and NIR,
    - Typical FWHM is 0.03 to 0.2 times the CWL,
    - Typical out of band blocking is OD 6.0 to OD 7.0,
    - These filters are commonly used for Fluorescence emission bands

Table 1

	The factors below, when multiplied by the nominal HBW, will give the bandwidth at the indicated level of transmission.					
Transmission	SC Series 1 Cavity	NB Series 2 Cavity	BP Series 3 Cavity	WB Series 4 Cavity	WB Series 5 Cavity	DF Series 6 Cavity
0.08	0.43	0.65	0.83	0.92	0.96	0.96
Half peak	1.00	1.00	1.00	1.00	1.00	1.00
10^{-1}	1.2	1.7	1.4	1.2	1.1	1.1
10^{-2}	3.3	3.2	2.0	1.5	1.4	1.2
10^{-3}	9.6	5.6	3.0	2.1	1.6	1.4
10^{-4}	33	11	4.5	3.7	2.0	1.7
10^{-5}	–	–	–	–	–	1.8
10^{-6}	–	–	–	–	–	3.2

- CF is a long pass or short pass filter of moderate slope. The value of slope is typically 2% from 80% T to 90% R
- AF is a band pass filter that is defined by a sharp cut-on and cut-off filter. Typical edges are a few percent from OD 0.3 to OD 5.0+
- SP is a Short-Pass edge filter
- LP is a Long-Pass edge filter
- HSP is a Sputtered Short-Pass filter
- HLP is a sputtered Long-Pass filter
- HBP is a sputtered band pass filter
- Dichroic-LP is a Long-Pass filter intended for non -normal incidence, usually 45 degrees
- Dichroic-SP is a Short-Pass filter intended for use at non-normal incidence, usually 45 degrees


OPTICAL DENSITY
0.0
1.0
2.0
3.0
4.0
5.0
6.0
% TRANSMISSION
100
10.0
1.0
0.1
0.01
0.001
0.0001
1 CAVITY
2 CAVITIES
3 CAVITIES
(industy standard)
4 CAVITIES
5 CAVITIES
6 CAVITIES
(DF Series)
400
450
500
550
600
λ (nm)