



**ANDOVER CORPORATION**  
Quality Optical Filters and Coatings  
**2009 - 2010**

## ORDERING INFORMATION

### Four Ways to Order

<b>Online</b>	<b>www.andovercorp.com</b>
<b>Email</b>	<b>sales@andovercorp.com</b>
<b>Telephone</b>	<b>US toll-free 1.888.893.9992</b> <b>International +00.1.603.893.6888</b>
<b>Fax</b>	<b>603.893.6508</b>

### Pricing

Current prices are available at [andovercorp.com](http://andovercorp.com) by clicking on the part numbers for particular items. For a complete price list or a specific quote, please contact our sales department.

### Purchase Orders

Andover Corporation accepts e-mail, written, and online orders from customers with an open line of credit. New customers must confirm their orders in writing and supply credit references upon request.

### Blanket Orders

Andover Corporation can help reduce your inventory by scheduling automatic delivery of your order over time. Complete details are available here: <http://www.andovercorp.com/info>

### Payment Terms

Net 30 days from date of invoice for customers with established lines of credit. International customers should check with the sales department to determine if prepayment is required. All foreign orders are subject to shipping and banking fees. For blanket orders, please contact our sales department for special terms and conditions. Visa, MasterCard and American Express accepted.



### Shipping

Most standard items ship within two days of receipt of an order. All out-of-stock products are shipped within two weeks. For rush orders, one-day shipping may be available.

All prices are FOB Salem, New Hampshire, USA. Shipments are freight prepaid and billed to the buyer.

**Order online for free ground shipping within the US.**

### Return Policy

Andover Corporation accepts returns of defective items up to one year from the invoice date. Before returning any items, please contact our technical sales staff for a Return Goods Authorization (RGA) number and complete shipping instructions.

## LIMITED WARRANTY

Andover warrants that all products shall conform to the product specifications and shall be free from defects in materials and workmanship for a period of one year from date of purchase. This Limited Warranty shall not apply in the event of any failure caused by accident, misuse, neglect, alteration or improper installation or repair by the purchaser.

*Disclaimer of other warranties.* The limited warranty set forth above is in place of other warranties, express or implied, and Andover expressly disclaims all other warranties, including warranties of merchantability and fitness for a particular purpose. Specifically, it is the purchaser's responsibility to test and determine the suitability of the products for purchaser's intended use, which shall be the sole responsibility of the purchaser.

*Limitation of remedies and damages.* Andover's sole obligation and the purchaser's sole and exclusive remedy under the Limited Warranty set forth above shall be limited to (a) replacement of defective products provided that written claim of the defect is sent to Andover within the Limited Warranty period, the original product is returned with transportation prepaid, and Andover's inspection establishes the existence of such defect; or (b) at the sole discretion of Andover, return of the original purchase price received by Andover from the purchaser. Andover shall in no event be liable for any damages, including without limitation, lost profits, incidental or consequential damages by reason of or in connection with the purchase or use of the products.

*Indemnification.* The purchaser agrees to indemnify and hold Andover harmless from and against any claim, loss, cost or expense resulting from purchaser's use of the products, whether such claim arises in contract, tort or otherwise.

*Governing law.* All matters arising under this Limited Warranty and other terms and conditions of sale shall be governed by the laws of the State of New Hampshire. The purchaser consents to the exclusive jurisdiction of the courts of the State of New Hampshire in all matters relating to the purchase, sale and use of the products.

# SEMI-CUSTOM BANDPASS



- Wavelengths from the ultraviolet through infrared
- Bandwidths from 0.15nm to 80nm
- Delivery within 10 days of order
- See page 8 for general specifications

Thanks to a large inventory of components, Andover Corporation can fabricate and deliver higher-performance commercial quality bandpass filters to your specifications within 5-10 days from receipt of order. To specify your semi-custom filter, all you have to do is follow three quick steps.

1. Select the desired bandwidth, filter type, and center wavelength from the range listed.
2. Select the blocking range.
3. Select the size and corresponding part number.

All other features are predetermined by these three choices. The out-of-band blocking of these filters is  $10^{-4}$  within the defined spectral range. Optional threaded rings available. Image quality versions available, please call for pricing and delivery.

SELECT  
1.

SELECT  
2.

SELECT  
3.

Bandwidth (FWHM) (nm)	Cavities/ Filter Type	CW/L Range (nm)	CW/L Tolerance (%)	Min. T (%) When Blocked to			Size, Shape & Part Number		
				1 $\mu$	FIR	N*	12.5mm $\emptyset$ ○	25mm $\emptyset$ ○	50mm $\emptyset$ ○
0.15 $\pm$ 0.05	1/1	450.0–550.0	+0.1/-0	40	30	1.45	001FC10-12.5	001FC10-25	001FC10-50
	1/1	550.1–750.0	+0.1/-0	45	40	1.45	001FC12-12.5	001FC12-25	001FC12-50
0.20 $\pm$ 0.05	1/1	450.0–550.0	+0.1/-0	45	35	1.45/2.05	002FC10-12.5	002FC10-25	002FC10-50
	1/1	550.1–750.0	+0.1/-0	45	35	2.05	002FC12-12.5	002FC12-25	002FC12-50
0.30 $\pm$ 0.10	2/2	450.0–550.0	+0.1/-0	35	25	1.45	003FC10-12.5	003FC10-25	003FC10-50
	2/2	550.1–750.0	+0.1/-0	40	35	2.05	003FC12-12.5	003FC12-25	003FC12-50
0.30 to 0.40	3/3	550.0–750.0	+0.1/-0	35	30	2.05	004FC12-12.5	004FC12-25	004FC12-50
0.50 $\pm$ 0.10	2/2	450.0–550.0	+0.1/-0	40	30	1.45/2.05	005FC10-12.5	005FC10-25	005FC10-50
	2/2	550.1–750.0	+0.1/-0	45	35	2.05	005FC12-12.5	005FC12-25	005FC12-50
0.60 $\pm$ 0.10	2/2	430.0–480.0	$\pm$ 0.1	40	35	1.45	006FC08-12.5	006FC08-25	006FC08-50
	2/2	480.1–550.0	$\pm$ 0.1	45	35	2.05	006FC10-12.5	006FC10-25	006FC10-50
	2/2	550.1–750.0	$\pm$ 0.1	45	25	2.05	006FC12-12.5	006FC12-25	006FC12-50
0.50 to 0.80	3/3	480.0–550.0	$\pm$ 0.1	40	30	2.05	007FC10-12.5	007FC10-25	007FC10-50
	3/3	550.1–750.0	$\pm$ 0.1	45	35	2.05	007FC12-12.5	007FC12-25	007FC12-50
	3/3	750.1–950.0	$\pm$ 0.1	45	35	2.05	007FC14-12.5	007FC14-25	007FC14-50
0.80 $\pm$ 0.20	2/2	430.0–480.0	+0.2/-0	45	40	1.45	008FC08-12.5	008FC08-25	008FC08-50
	2/2	480.1–550.0	+0.2/-0	45	40	2.05	008FC10-12.5	008FC10-25	008FC10-50
	2/2	550.1–750.0	+0.2/-0	50	45	2.05	008FC12-12.5	008FC12-25	008FC12-50
	2/2	750.1–950.0	+0.2/-0	50	45	2.05	008FC14-12.5	008FC14-25	008FC14-50
	2/2	950.1–1100.0	+0.2/-0	50	40	2.05	008FC16-12.5	008FC16-25	008FC16-50

SEMI-CUSTOM BANDPASS FILTERS

SELECT

1.

SELECT

2.

SELECT

3.

Bandwidth (FWHM) (nm)	Cavities/ Filter Type	CW/L Range (nm)	CW/L Tolerance (%)	Min. T (%)			Size, Shape & Part Number		
				When Blocked to 1μ	FIR	N*	12.5mm Ø ○	25mm Ø ○	50mm Ø ○
1.0 ± 0.2	2/2	340.0–385.0	+0.2/-0	-	10	1.45	010FC04-12.5	010FC04-25	010FC04-50
	2/2	385.1–430.0	+0.2/-0	25	20	1.45	010FC06-12.5	010FC06-25	010FC06-50
	2/2	430.1–480.0	+0.2/-0	40	35	1.45/2.05	010FC08-12.5	010FC08-25	010FC08-50
	2/2	480.1–550.0	+0.2/-0	50	40	2.05	010FC10-12.5	010FC10-25	010FC10-50
	2/2	550.1–750.0	+0.2/-0	55	45	2.05	010FC12-12.5	010FC12-25	010FC12-50
	2/2	750.1–950.0	+0.2/-0	55	45	2.05	010FC14-12.5	010FC14-25	010FC14-50
	2/2	950.1–1100.0	+0.2/-0	55	40	2.05	010FC16-12.5	010FC16-25	010FC16-50
1.0 ± 0.2	3/3	480.0–550.0	+0.2/-0	50	35	1.45/2.05	010FC35-12.5	010FC35-25	010FC35-50
	3/3	550.1–750.0	+0.2/-0	55	40	2.05	010FC36-12.5	010FC36-25	010FC36-50
	3/3	750.1–950.0	+0.2/-0	55	40	2.05	010FC37-12.5	010FC37-25	010FC37-50
	3/3	950.1–1100.0	+0.2/-0	50	35	2.05	010FC38-12.5	010FC38-25	010FC38-50
1.5 ± 0.3	2/2	250.0–320.0	+0.3/-0	-	6	1.45	015FC02-12.5	015FC02-25	015FC02-50
	2/2	320.1–385.0	+0.3/-0	-	10	1.45	015FC04-12.5	015FC04-25	015FC04-50
	2/2	385.1–430.0	+0.3/-0	25	20	1.45	015FC06-12.5	015FC06-25	015FC06-50
	2/2	430.1–480.0	+0.3/-0	40	30	1.45/2.05	015FC08-12.5	015FC08-25	015FC08-50
	2/2	480.1–550.0	+0.3/-0	55	50	2.05	015FC10-12.5	015FC10-25	015FC10-50
	2/2	550.1–750.0	+0.3/-0	55	50	2.05	015FC12-12.5	015FC12-25	015FC12-50
	2/2	750.1–950.0	+0.3/-0	55	50	2.05	015FC14-12.5	015FC14-25	015FC14-50
2.0 ± 0.5	2/2	240.0–320.0	+0.5/-0	-	6	1.45	020FC02-12.5	020FC02-25	020FC02-50
	2/2	320.1–385.0	+0.5/-0	-	10	1.45	020FC04-12.5	020FC04-25	020FC04-50
	2/2	385.1–430.0	+0.4/-0	40	35	1.45	020FC06-12.5	020FC06-25	020FC06-50
	2/2	430.1–480.0	+0.4/-0	50	45	1.45/2.05	020FC08-12.5	020FC08-25	020FC08-50
	2/2	480.1–550.0	+0.4/-0	55	50	2.05	020FC10-12.5	020FC10-25	020FC10-50
	2/2	550.1–750.0	+0.4/-0	55	50	2.05	020FC12-12.5	020FC12-25	020FC12-50
	2/2	750.1–950.0	+0.4/-0	65	50	2.05	020FC14-12.5	020FC14-25	020FC14-50
	2/2	950.1–1100.0	+0.4/-0	55	45	2.05	020FC16-12.5	020FC16-25	020FC16-50
2.0 ± 0.5	3/3	430.0–480.0	+0.4/-0	50	40	1.45/2.05	020FC34-12.5	020FC34-25	020FC34-50
	3/3	480.1–550.0	+0.4/-0	55	45	2.05	020FC35-12.5	020FC35-25	020FC35-50
	3/3	550.1–750.0	+0.4/-0	55	45	2.05	020FC36-12.5	020FC36-25	020FC36-50
	3/3	750.1–950.0	+0.4/-0	60	50	2.05	020FC37-12.5	020FC37-25	020FC37-50
	3/3	950.1–1100.0	+0.4/-0	65	45	2.05	020FC38-12.5	020FC38-25	020FC38-50
3.0 ± 0.5	2/2	240.0–320.0	+0.5/-0	-	8	1.45	030FC02-12.5	030FC02-25	030FC02-50
	2/2	320.1–385.0	+0.5/-0	-	10	1.45	030FC04-12.5	030FC04-25	030FC04-50
	2/2	385.1–430.0	+0.5/-0	40	25	1.45	030FC06-12.5	030FC06-25	030FC06-50
	2/2	430.1–480.0	+0.5/-0	45	35	1.45/2.05	030FC08-12.5	030FC08-25	030FC08-50
	2/2	480.1–550.0	+0.5/-0	55	50	2.05	030FC10-12.5	030FC10-25	030FC10-50
	2/2	550.1–750.0	+0.5/-0	55	50	2.05	030FC12-12.5	030FC12-25	030FC12-50
	2/2	750.1–950.0	+0.5/-0	55	50	2.05	030FC14-12.5	030FC14-25	030FC14-50
	2/2	950.1–1100.0	+0.5/-0	65	50	2.05	030FC16-12.5	030FC16-25	030FC16-50

**SEMI-CUSTOM BANDPASS FILTERS**

SELECT

**1.**

SELECT

**2.**

SELECT

**3.**

Bandwidth (FWHM) (nm)	Cavities/ Filter Type	CW/L Range (nm)	CW/L Tolerance (%)	Min. T (%)			Size, Shape & Part Number		
				When Blocked to 1μ	FIR	N*	12.5mm Ø ○	25mm Ø ○	50mm Ø ○
3.0 ± 0.5	3/3	430.0–480.0	+0.5/-0	50	40	1.45/2.05	030FC34-12.5	030FC34-25	030FC34-50
	3/3	480.1–550.0	+0.5/-0	55	45	2.05	030FC35-12.5	030FC35-25	030FC35-50
	3/3	550.1–750.0	+0.5/-0	55	45	2.05	030FC36-12.5	030FC36-25	030FC36-50
	3/3	750.1–950.0	+0.5/-0	60	50	2.05	030FC37-12.5	030FC37-25	030FC37-50
	3/3	950.1–1100.0	+0.5/-0	55	45	2.05	030FC38-12.5	030FC38-25	030FC38-50
5.0 ± 1.0	2/2	240.0–320.0	+1/-0	-	8	1.45	050FC02-12.5	050FC02-25	050FC02-50
	2/2	320.1–385.0	+1/-0	-	25	1.45	050FC04-12.5	050FC04-25	050FC04-50
	2/2	385.1–480.0	+1/-0	45	35	1.45/2.05	050FC06-12.5	050FC06-25	050FC06-50
	2/2	480.1–550.0	+1/-0	55	50	2.05	050FC10-12.5	050FC10-25	050FC10-50
	2/2	550.1–750.0	+1/-0	55	50	2.05	050FC12-12.5	050FC12-25	050FC12-50
	2/2	750.1–950.0	+1/-0	60 <sup>a</sup>	45	2.05	050FC14-12.5	050FC14-25	050FC14-50
	2/2	950.1–1100.0	+1/-0	65 <sup>b</sup>	45	2.05	050FC16-12.5	050FC16-25	050FC16-50
	2/2	1100.1–1300.0	+1/-0	55 <sup>c</sup>	40	2.05	050FC18-12.5	050FC18-25	050FC18-50
	2/2	1300.1–1550.0	+1/-0	50 <sup>c</sup>	35	2.05	050FC19-12.5	050FC19-25	050FC19-50
2/2	1550.1–2000.0	+1/-0	50 <sup>c</sup>	-	2.05	050FC20-12.5	050FC20-25	050FC20-50	
5.0 ± 1.0	3/3	400.0–430.0	+1/-0	45	40	1.45	050FC33-12.5	050FC33-25	050FC33-50
	3/3	430.1–460.0	+1/-0	55	40	1.45	050FC34-12.5	050FC34-25	050FC34-50
	3/3	460.1–550.0	+1/-0	55	45	1.45/2.05	050FC35-12.5	050FC35-25	050FC35-50
	3/3	550.1–750.0	+1/-0	55	45	2.05	050FC36-12.5	050FC36-25	050FC36-50
	3/3	750.1–950.0	+1/-0	60	45	2.05	050FC37-12.5	050FC37-25	050FC37-50
	3/3	950.1–1100.0	+1/-0	55 <sup>b</sup>	40	2.05	050FC38-12.5	050FC38-25	050FC38-50
	3/3	1100.1–1300.0	+1/-0	50 <sup>c</sup>	35	2.05	050FC39-12.5	050FC39-25	050FC39-50
5.0 ± 1.0	4/4	460.0–550.0	+1/-0	60	50	1.45/2.05	050FC45-12.5	050FC45-25	050FC45-50
	4/4	550.1–750.0	+1/-0	60	50	2.05	050FC46-12.5	050FC46-25	050FC46-50
	4/4	750.1–950.0	+1/-0	55	45	2.05	050FC47-12.5	050FC47-25	050FC47-50
	4/4	950.1–1100.0	+1/-0	55	40	2.05	050FC48-12.5	050FC48-25	050FC48-50
10.0 ± 2.0	MDM/7	214.0–250.0	+2/-0	-	12	--	100FC00-12.5	100FC00-25	100FC00-50
	MDM/7	250.1–320.0	+2/-0	-	15	--	100FC02-12.5	100FC02-25	100FC02-50
	3/3	320.1–385.0	+2/-0	-	25	--	100FC32-12.5	100FC32-25	100FC32-50
	3/3	385.1–430.0	+2/-0	50	40	1.45	100FC33-12.5	100FC33-25	100FC33-50
	3/3	430.1–480.0	+2/-0	60	50	1.45/2.05	100FC34-12.5	100FC34-25	100FC34-50
	3/3	480.1–550.0	+2/-0	70	55	2.05	100FC35-12.5	100FC35-25	100FC35-50
	3/3	550.1–750.0	+2/-0	70	55	2.05	100FC36-12.5	100FC36-25	100FC36-50
	3/3	750.1–950.0	+2/-0	70 <sup>a</sup>	45	2.05	100FC37-12.5	100FC37-25	100FC37-50
	3/3	950.1–1100.0	+2/-0	70 <sup>b</sup>	45	2.05	100FC38-12.5	100FC38-25	100FC38-50
	3/3	1100.1–1300.0	+2/-0	70 <sup>c</sup>	35	2.05	100FC39-12.5	100FC39-25	100FC39-50
	2/2	1300.1–1550.0	+2/-0	70 <sup>d</sup>	35	2.05	100FC40-12.5	100FC40-25	100FC40-50
	2/2	1550.1–2400.0	+2/-0	60 <sup>e</sup>	-	2.05	100FC41-12.5	100FC41-25	100FC41-50

a= Blocking to 1200nm b= Blocking to 1300nm c= Blocking to 1550nm d= Blocking to 2400nm e= Blocking to 3200nm

# SEMI-CUSTOM BANDPASS FILTERS

SELECT

1.

SELECT

2.

SELECT

3.

Bandwidth (FWHM) (nm)	Cavities/ Filter Type	CW/L Range (nm)	CW/L Tolerance (%)	Min. T (%)			Size, Shape & Part Number		
				When Blocked to 1μ	FIR	N*	12.5mm Ø ○	25mm Ø ○	50mm Ø ○
10.0 ± 2.0	4/4	460.0–550.0	+2/-0	60	45	1.45/2.05	100FC45-12.5	100FC45-25	100FC45-50
	4/4	550.1–750.0	+2/-0	60	45	2.05	100FC46-12.5	100FC46-25	100FC46-50
	4/4	750.1–950.0	+2/-0	70 <sup>a</sup>	50	2.05	100FC47-12.5	100FC47-25	100FC47-50
	4/4	950.1–1100.0	+2/-0	70 <sup>b</sup>	45	2.05	100FC48-12.5	100FC48-25	100FC48-50
	4/4	1100.1–1300.0	+2/-0	70 <sup>c</sup>	30	2.05	100FC49-12.5	100FC49-25	100FC49-50
20.0 ± 4.0	MDM/8	214.0–250.0	±2.5	-	12	--	200FC00-12.5	200FC00-25	200FC00-50
	MDM/8	250.1–320.0	±2.5	-	15	--	200FC02-12.5	200FC02-25	200FC02-50
	5/5	320.1–400.0	±2.5	-	30	1.45	200FC32-12.5	200FC32-25	200FC32-50
20.0 ± 4.0	3/3	400.1–480.0	±2.0	50	45	1.45	200FC33-12.5	200FC33-25	200FC33-50
	3/3	480.1–550.0	±2.0	65	50	1.45	200FC35-12.5	200FC35-25	200FC35-50
	3/3	550.1–750.0	±2.0	70	50	1.45/2.05	200FC36-12.5	200FC36-25	200FC36-50
	3/3	750.1–950.0	±2.0	70 <sup>a</sup>	50	2.05	200FC37-12.5	200FC37-25	200FC37-50
	3/3	950.1–1100.0	±2.0	70 <sup>b</sup>	50	2.05	200FC38-12.5	200FC38-25	200FC38-50
	3/3	1100.1–1300.0	±2.0	70 <sup>c</sup>	30	2.05	200FC39-12.5	200FC39-25	200FC39-50
	3/3	1300.1–1550.0	±2.0	70 <sup>d</sup>	30	2.05	200FC40-12.5	200FC40-25	200FC40-50
	2/2	1550.1–2400.0	±2.0	60 <sup>e</sup>	-	2.05	200FC41-12.5	200FC41-25	200FC41-50
20.0 ± 4.0	4/4	480.0–550.0	±2.0	65	45	1.45	200FC45-12.5	200FC45-25	200FC45-50
	4/4	550.1–750.0	±2.0	70	50	1.45/2.05	200FC46-12.5	200FC46-25	200FC46-50
	4/4	750.1–950.0	±2.0	70 <sup>a</sup>	50	2.05	200FC47-12.5	200FC47-25	200FC47-50
	4/4	950.1–1100.0	±2.0	70 <sup>b</sup>	40	2.05	200FC48-12.5	200FC48-25	200FC48-50
40.0 ± 10.0	MDM/8	230.0–250.0	±5.0	-	15	--	400FC00-12.5	400FC00-25	400FC00-50
	MDM/8	250.1–320.0	±5.0	-	20	--	400FC02-12.5	400FC02-25	400FC02-50
	5/5	320.1–399.9	±5.0	-	30	1.45	400FC52-12.5	400FC52-25	400FC52-50
50.0 ± 10.0	5/5	400.0–460.0	±5.0	60	45	1.45	500FC53-12.5	500FC53-25	500FC53-50
	5/5	460.1–520.1	±5.0	70	50	1.45	500FC54-12.5	500FC54-25	500FC54-50
	4/4	520.1–750.1	±5.0	70	50	2.05	500FC46-12.5	500FC46-25	500FC46-50
	4/4	750.1–900.0	±5.0	75 <sup>a</sup>	50	2.05	500FC47-12.5	500FC47-25	500FC47-50
	3/3	900.1–1100.0	±5.0	75 <sup>b</sup>	45	2.05	500FC38-12.5	500FC38-25	500FC38-50
	3/3	1100.1–1300.0	±5.0	70 <sup>c</sup>	35	2.05	500FC39-12.5	500FC39-25	500FC39-50
	3/3	1300.1–1550.0	±5.0	70 <sup>d</sup>	30	2.05	500FC40-12.5	500FC40-25	500FC40-50
	3/3	1550.1–2400.0	±5.0	70 <sup>e</sup>	-	2.05	500FC41-12.5	500FC41-25	500FC41-50
60.0 ± 10.0	5/5	340.0–399.0	±6.0	-	30	1.45	600FC52-12.5	600FC52-25	600FC52-50
80.0 ± 20.0	5/5	460.0–750.0	±10.0	75	-	1.45	800FC55-12.5	800FC55-25	800FC55-50
	4/4	750.1–900.0	±10.0	75 <sup>a</sup>	-	1.45	800FC47-12.5	800FC47-25	800FC47-50
	4/4	900.1–1100.0	±10.0	70 <sup>b</sup>	-	2.05	800FC48-12.5	800FC48-25	800FC48-50
	4/4	1100.1–1300.0	±10.0	70 <sup>c</sup>	-	2.05	800FC49-12.5	800FC49-25	800FC49-50
	4/4	1300.1–1550.0	±10.0	70 <sup>d</sup>	-	2.05	800FC50-12.5	800FC50-25	800FC50-50
	4/4	1550.1–2400.0	±10.0	70 <sup>e</sup>	-	2.05	800FC51-12.5	800FC51-25	800FC51-50

a= Blocking to 1200nm b= Blocking to 1300nm c= Blocking to 1550nm d= Blocking to 2400nm e= Blocking to 3200nm