

# Acousto-Optic Frequency Shifters

These systems allow for a frequency shift of the incident laser beam, equal to the driving signal RF frequency. Depending on the alignment (Bragg angle incidence), this shift can be either positive or negative. An optimum alignment gives a high efficiency, allowing for serial use of several devices to reach a broader frequency shift range.

Model	Spectral Range ( $\mu\text{m}^*$ )	Material	Clear Aperture (mm)	RF Bandwidth (MHz)	Central Frequency (MHz)
1201 E -1	0.44 -0.7	Glass	1.7	14	40
1201 E-2	1.06	Glass	1.7	14	40
1205C-1	0.44 - >1.5	PbMo04	1	30	80
1205C-2	0.44 - >1.5	PbMo04	2	40	80
1206C	0.44 - >1.5	PbMo04	1	50	110
1250C	0.44 - >1.5	PbMo04	0.75	100	200
OPP-1	0.44 - >1.5	PbMo04	1.5	200	300
1250C-829A	0.36 ->1.5	Te02	0.45	100	260
1207B-3	2.5 - 11	Germanium	3	20	40
1207B-6	2.5 - 11	Germanium	6	20	40

\* Depending on selected anti reflection coating

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## Fixed Frequency Drivers

Model	Type	Frequency (MHz)	Rise Time (ns)	Output Power RF (W)
221A/231A	Driver	40	<5	1 - 1.6
222A/232A	Driver	80	<5	1 - 1.6
223A/233A	Driver	110	<5	1 - 1.6
225A/235A	Driver	200	<5	1
226A/236A	Driver	260	<5	1

## Variable Frequency Drivers

Model	Type	Frequency (MHz)	Linearity	Output Power RF (W)
D321	Driver	30 - 50	+/-1%	1 - 1.6
D301B/D322B	Driver	57 - 103	+/-1%	1 - 1.6
D302B/D323B	Driver	82 - 138	+/-1%	1 - 1.6
D325	Driver	150 - 300	+/-1%	1

## RF Amplifiers

Model	Type	Frequency (MHz)	Output Power RF (W)	Gain (dB)
RFA-105	Amplifier	30 - 200	7	9
RFA-108	Amplifier	10 - 150	8	10
RFA-118	Amplifier	30 - 150	18	12
RFA - 1108	Amplifier	10 - 150	8	40
RFA - 1150 *	Amplifier	30 - 95	50	57

\* Also available with 2 or 4 RF outputs