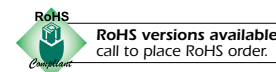


Acousto-Optic Modulators

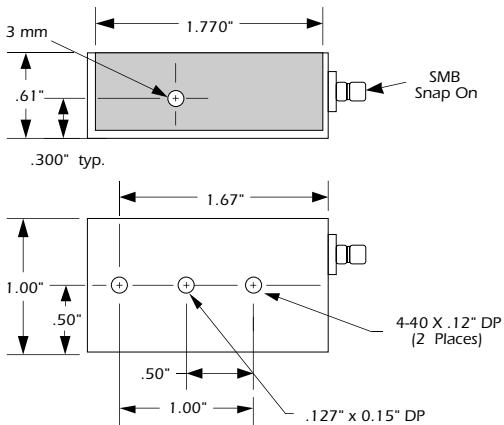
AO modulators allow for analog amplitude modulation of collimated light. Diffraction occurs by applying RF energy at the center frequency. Changing the RF level will vary intensity of the light being diffracted. The diffracted light will be frequency shifted up (+1 order) or down (-1 order) by the carrier frequency of the RF signal.

| Applications | |
|--------------|----------------------------|
| ■ | Photo Processing |
| ■ | Micro Machining |
| ■ | Laser Displays |
| ■ | Disc Mastering |
| ■ | Doppler Frequency Shifting |
| ■ | Pulse Picking |

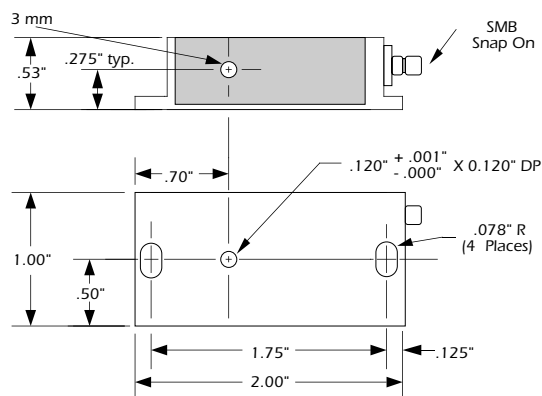
| Model # | Part # | Wavelength (nm) | Material | Center Freq | RF Power (Watts) | Min Rise Time (ns) | Mod Max BW (MHz) | Active Acoustic Aperture (h x l) | Package | Connector Type |
|-----------------------------|-------------|-----------------|--------------------|-------------|------------------|--------------------|------------------|----------------------------------|----------|----------------|
| Amplitude Modulation | | | | | | | | | | |
| 3200-1220 | 97-02513-01 | 257 | Crystalline Quartz | 200 | 1.0 | 10 | 50 | 0.25 x 0.5 | Style 2B | SMB |
| 3200-1210 | 97-02377-01 | 325-365 | Crystalline Quartz | 200 | 2.5 | 10 | 50 | 0.25 x 0.5 | Style 2B | SMB |
| 3220-120 | 97-02439-01 | 413 | Crystalline Quartz | 220 | 2.5 | 19 | 23 | 0.25 x 0.5 | Style 2B | SMB |
| 3110-121 | 97-01638-01 | 442-488 | TeO ₂ | 110 | 0.5 | 18 | 25 | 0.60 x 2.5 | Style 2 | SMB |
| 3200-120 | 99-48146-10 | 442-488 | TeO ₂ | 200 | 0.7 | 10 | 43 | 0.45 x 2.5 | Style 2 | SMB |
| 3224-120 | 97-20010-01 | 442-488 | TeO ₂ | 224 | 0.7 | 10 | 36 | 0.45 x 2.5 | Style 2 | SMB |
| 3225-120 | 97-20122-01 | 442-488 | TeO ₂ | 224 | 0.9 | 15 | 40 | 0.60 x 2.5 | Style 2 | SMB |
| 3350-120 | 97-02089-01 | 488-532 | TeO ₂ | 350 | 1.0 | 6 | 86 | 0.10 x 2.0 | Style 2 | SMB |
| 3080-110 | 99-48201-10 | 442-633 | TeO ₂ | 80 | 0.5 | 25 | 13 | 1.00 x 2.5 | Style 1 | SMB |
| 3080-120 | 99-48201-11 | 442-633 | TeO ₂ | 80 | 0.5 | 25 | 13 | 1.00 x 2.5 | Style 2 | SMB |
| 3080-151 | 99-01000-01 | 442-633 | TeO ₂ | 80 | 1.0 | 25 | 18 | 2.00 x 2.5 | Style 5 | BNC |
| 3110-120 | 99-20068-01 | 442-633 | TeO ₂ | 110 | 0.7 | 18 | 22 | 0.60 x 2.5 | Style 2 | SMB |
| 3200-115 | 97-01621-01 | 515-633 | TeO ₂ | 200 | 1.5 | 10 | 31 | 0.40 x 2.5 | Style 1 | SMB |
| 3200-144 | 97-01407-02 | 515-633 | TeO ₂ | 200 | 1.0 | 10 | 33 | 0.32 x 2.5 | Style 4 | SMA |
| 3080-122 | 97-01280-01 | 780-850 | TeO ₂ | 80 | 1.0 | 25 | 12 | 1.00 x 2.5 | Style 2 | SMB |
| 3200-124 | 97-01544-01 | 780-850 | TeO ₂ | 200 | 2.0 | 10 | 19 | 0.32 x 2.5 | Style 2 | SMB |
| 3080-197 | 97-02848-01 | 1047-1060 | TeO ₂ | 80 | 1.5 | 25 | 10 | 1.00 x 2.5 | Style 2 | SMB |
| 3110-197 | 97-01672-11 | 1047-1060 | TeO ₂ | 110 | 2.5 | 18 | 3 | 1.25 x 2.5 | Style 2 | SMB |
| 3180-110 | 97-02159-03 | 1047-1060 | TeO ₂ | 180 | 2.5 | 11 | 42 | 0.10 x 2.5 | Style1 | SMB |
| 3200-1113 | 97-02029-05 | 1047-1060 | TeO ₂ | 200 | 2.5 | 10 | 48 | 0.10 x 2.5 | Style 1 | SMB |
| 3165-1 | 97-01287-02 | 1300-1550 | TeO ₂ | 165 | 4.0 | 12 | 6 | 0.60 x 2.5 | Style 1 | SMB |
| Frequency Shifters | | | | | | | | | | |
| 3080-125 | 97-01598-01 | 442-633 | TeO ₂ | 80 | 1.0 | 25 | 18 | 2.00 x 2.5 | Style 2 | SMB |
| 3100-125 | 97-03035-01 | 442-633 | TeO ₂ | 100 | 1.1 | NA | NA | 1.50 x 2.5 | Style 2B | SMB |
| 3200-125 | 97-03036-01 | 442-633 | TeO ₂ | 200 | 1.1 | NA | NA | 1.50 x 2.5 | Style 2B | SMB |



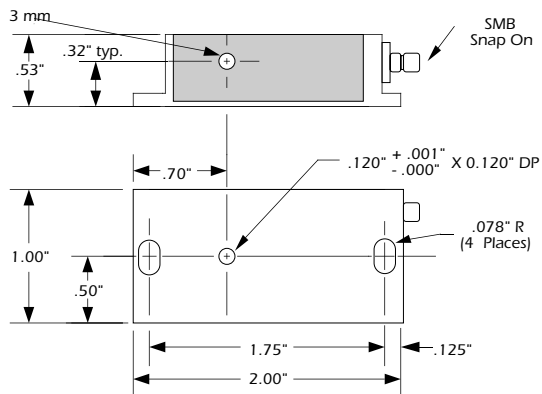
Acousto-Optic Modulators



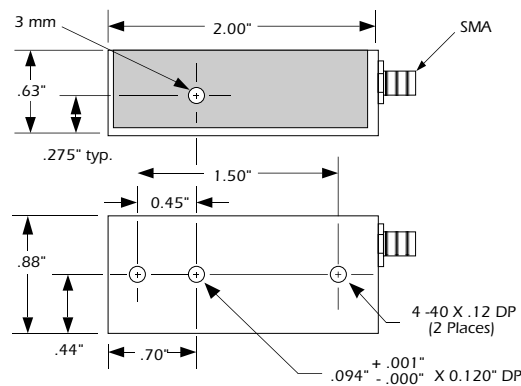
Style 1



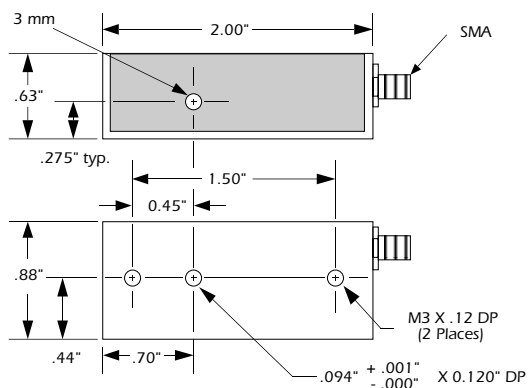
Style 2



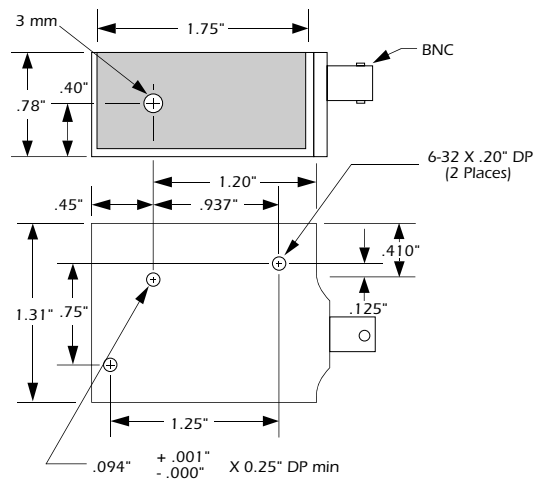
Style 2B



Style 3



Style 4



Style 5