

# Gooch & Housego



## 300 – 400nm Acousto-Optic Modulator

I-M110-3C10BB-3-GH27

An acousto-optic modulator for use in the 300 - 400nm wavelength range, ideal for frequency tripled Nd:YAG and Nd:YVO<sub>4</sub> lasers, or 351 / 364nm Argon lasers.

Manufactured in Crystal Quartz for improved thermal management and efficiency. This modulator combines high quality optical finishing with high grade anti-reflection coatings to maintain superior beam quality and high optical throughput.

In addition to the specifications indicated, we also offer alternative wavelengths, RF frequencies, active apertures & a wide range of custom housing configurations. We also offer full custom design & manufacturing, enabling our customers to achieve the perfect solution.

#### **Key Features:**

Crystal Quartz 300 – 400nm High damage threshold 110MHz

#### **Applications:**

Industrial (material processing):

- Micromachining
- Lithography
- Patterning

#### **General Specifications**

Interaction material: Crystal Quartz Wavelength: 300 - 400nm

Optical polarisation: Linear, vertical to base

AR coating reflectivity: < 0.5% per surface (< 0.3% at 355nm)

Damage threshold: > 500MW/cm<sup>2</sup> (pulsed)

Transmission (single pass): > 99.0%
RF frequency: 110MHz
VSWR: < 1.2:1
Active aperture: 3.0mm

Acoustic mode: Compressional
Rise-time: 113ns/mm
Separation angle: 6.8mrad at 355nm

Diffraction Efficiency: > 85% RF power: < 3W

Recommended RF Driver: A35110-S-1/50-P4K7U

As part of our policy of continuous product improvement we reserve the right to change specifications at any time





### **Ordering Code**

**Explanation: I-M110-3C10BB-3-GH27** (Modulator, 110MHz, 3.0mm active aperture, compressional mode, Crystal Quartz, 300 - 400nm, SMA male bulkhead, GH27 housing).



