

Gooch & Housego



Conduction-cooled Acousto-Optic Q-Switch

I-QS041-5C10V5-x5-ST3

A custom version of our Stallion Q-Switch, optimised for use at 2100nm.

The patented 'Stallion' manufacturing technique provides superior corrosion resistance whilst maintaining optimum performance and RF power handling.

Combining top grade Crystal Quartz with high quality optical finishing and in-house antireflection coatings, this Q-Switch exhibits very low insertion loss and high damage threshold.

In addition to the standard product shown, custom configurations are available for specialised applications. These include alternative housing options, wavelengths and RF frequencies.

Our scientists and engineers are available to assist in selecting the most appropriate model of Q-Switch and also RF driver for your application.

Please contact the sales team for further information.

Key Features:

2100nm Superior corrosion resistance Stainless steel cooling channels High damage threshold Push fit water-connectors Custom configurations available

Application examples:

Material processing Medical Scientific





General Specifications

Interaction material:

Wavelength:

AR coating reflectivity:

Damage threshold:

Transmission (single pass):

RF frequency:

Crystal Quartz

1900 - 2100nm

< 0.5% per surface

> 500MWcm⁻²

> 99.0%

40.68MHz

Acoustic mode: Compressional Active aperture: 5.0mm

VSWR: < 1.2:1 (<1.4:1 at 50W RF power)

Loss modulation: 70% RF power rating (maximum): 50W

Water flow rate: > 0.2l / minute Water-cooling channel material: Stainless steel 316 Recommended water temperature: $+22^{\circ}$ C to $+32^{\circ}$ C Thermal switch cut-off: $+65^{\circ}$ C $+/-5^{\circ}$ C Storage temperature: -20 to +70degC

Ordering Codes

Example: I-QS041-5C10V5-U5-ST3 (Q-Switch, 40.68MHz, 5mm active aperture, compressional mode, Crystal Quartz, 1900-2100nm, 6mm OD right angle push fit water-connectors, BNC, Stallion housing with M3 mounting holes)



