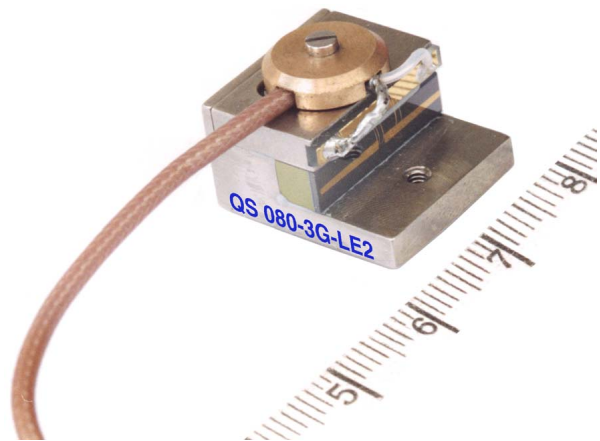


## AO Miniature Q-Switch

## QS 080-3G-YYn

With the QS 080-3G Landwehr offers an Acousto-Optic Miniature Q-Switch intended for use in compact, medium power, diode pumped Nd:YLF and Nd:YAG lasers. By utilising the AO interaction medium in Dense Flint Glass e.g. SF 6 with low loss anti reflection coating a relatively high damage threshold is obtainable. This Miniature Q-Switch is designed specially for use in unpolarized lasers where low rf drive powers are required. High technical performance guarantees pulse to pulse stability. A wide range of options are available.

This AO Q-Switch is designed for industry-standard applications as well as for university research.



### Technical Data

Interaction Material	Dense Flint Glass [SF 6 $\Rightarrow$ 3510 m·sec <sup>-1</sup> ]
Wavelength	1064 nm (others available on request)
Frequency	80 MHz standard systems
Anti Reflection Coating	Hard multi-layer dielectric
Reflectivity	$\leq 0.2$ % per surface - (< 0.1% typical)
Damage Threshold	$> 50$ MWcm <sup>-2</sup> (> 100 MWcm <sup>-2</sup> typical)
Transmission	$\geq 99.4$ % single pass
Acoustic Mode	Compressional - affects o-ray and e-ray equally
Active Aperture	0.5 mm (others available on request)
Interaction Length	10 mm • optional 16 mm

Risetime	185 nsec/mm
Loss Modulation @ 10 mm Interaction Length	> 30 % @ 1 Watt rf-power > 50 % @ 2 Watts rf-power > 65 % @ 3 Watts rf-power
RF Input Impedance	50 Ω nominal
VSWR	<1.2:1 @ 80 MHz
Cooling	Conduction through base

## Device Designation



Device	QS	• Q-Switch
Frequency	40, 80, 110	• Value in MHz
Interaction Material	3	• Dense Flint Glass SF 6
Wavelength	G	• 1064 nm
Special Designation	YYn	• Customer Identification

## Mechanics of Q-Switch

