An ultra compact conduction-cooled Acousto-Optic Q-Switch, ideally suited to short cavity, short pulse, low power DPSS lasers.

Utilising a highly efficient crystalline interaction material, greater than 85% loss modulation can be achieved without the need for active cooling.

Operating at 80MHz, the diffracted beam is sufficiently separated for most short cavities.

We also offer full custom design and manufacturing, enabling our customers to achieve the perfect solution. Our dedicated team of engineers and scientists are ready to assist you.

Key Features:
- Ultra compact package
- Conduction-cooled
- Polarisation insensitive
- High efficiency
- Custom configurations available

General Specifications

Interaction material: Tellurium Dioxide
Wavelength: 1047 - 1064nm
Optical polarisation: Insensitive
AR coating reflectivity: < 0.2% per surface
Damage threshold: > 50MWcm⁻² (assuming a pulse width of ~ 10ns)
Transmission (single pass): > 99.5%
RF frequency: 80MHz
VSWR: < 1.2:1
Active aperture: 1.0mm
Clear aperture: 1.4mm
Rise-time: 153ns/mm
Loss modulation: > 85%
RF power rating: 3W (max)
Beam separation: 20mrad
Acceptance angle (full): 12mrad
Cooling: Conduction through base
Ordering Code

Explanation: I-QS080-1C2G-E-3D1 (Q-Switch, 80MHz, 1.0mm active aperture, compressional mode, Tellurium Dioxide, 1064nm, SMA right angle male pigtail, 3D1 housing).

I - Q S 0 8 0 - 1 C 2 G - E - 3 D 1