

SA data sheet SA-1550-41-2ps-thin-x, $\lambda = 1550$ nm, thin saturable absorber for fiber coupling

Laser wavelength	$\lambda = 1400$ nm ... 1600 nm
Absorptance	$A_0 = 41$ %
Modulation depth	$\Delta T = 25$ %
Non-saturable loss	$A_{ns} = 16$ %
Fiber coupling insertion loss	≤ 1.6 dB
Saturation fluence	$\Phi_{sat} = 300$ $\mu\text{J}/\text{cm}^2$
Damage threshold	$\Phi = 1.5$ mJ/cm^2
Relaxation time constant	$\tau \sim 2$ ps
Chip area	1.3 mm x 1.3 mm; other dimensions on request
Chip thickness	150 μm ; semi-insulating GaAs
Front side protection	AR coating for 1550 nm
Back side coating	the SA back side is polished and antireflection coated for 1550 nm

Mounting option **x** denotes the type of mounting as follows:

- x = 1.0b-0** batch of 5 unmounted chips with area 1.0 mm x 1.0 mm
- x = 1.3b-0** batch of 5 unmounted chips with area 1.3 mm x 1.3 mm
- x = FC** SA chip with 150 μm thickness is mounted inside a 1 m long single mode fiber cable.
The fiber coupled SA has an additional coupling loss of about 15 %.

