

Data sheet SA-1030-34-3ps-x, $\lambda = 1030 \text{ nm}$ SA – Saturable Absorber in transmission

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|--------------------------|--|
| Laser wavelength | $\lambda = 1000 \text{ nm} \dots 1040 \text{ nm}$ |
| Absorptance | $A_0 = 34 \%$ |
| Modulation depth | $\Delta T = 20 \%$ |
| Non-saturable loss | $A_{ns} = 14 \%$ |
| Saturation fluence | $\Phi_{sat} = 300 \mu\text{J}/\text{cm}^2$ |
| Pulse damage threshold | $\Phi = 1.2 \text{ mJ}/\text{cm}^2$ |
| Relaxation time constant | $\tau \sim 3 \text{ ps}$ |
| Chip area | 5mm x 5mm; other dimensions on request |
| Chip thickness | 450 μm ; semi-insulating GaAs |
| Front side protection | AR coating for 1030 nm |
| Back side coating | the SA back side is polished and antireflection coated for 1030 nm |
| SA-1040-34-3ps-5.0-x | denotes the type of mounting as follows: |
| x = 0 | unmounted chip 5.0mm x 5.0mm |
| x = 12.7 g | glued on a copper cylinder with 12.7 mm \varnothing and 4 mm \varnothing center hole |
| x = 25.4 g | glued on a copper cylinder with 25.4 mm \varnothing and 4 mm \varnothing center hole |

Spectral low intensity transmittance and absorptance

