

SOC data sheet SOC-2000-40-28-10ps-x, $\lambda = 2000$ nm saturable output coupler

Laser wavelength	$\lambda = 2000$ nm
Absorptance	$A_0 = 40$ %
Transmittance	$T = 28$ %
Reflectance	$R = 32$ %
Modulation depth	$\Delta R = 23$ %
Non-saturable loss	$A_{ns} = 17$ %
Saturation fluence	$\Phi_{sat} = 80$ $\mu\text{J}/\text{cm}^2$
Damage threshold	$\Phi \sim 1$ mJ/cm^2
Relaxation time constant	$\tau \sim 10$ ps
Chip area	5.0 mm x 5.0 mm; other dimensions on request
Chip thickness	625 μm ; semi-insulating GaAs
Front side protection	with a dielectric layer
Back side AR coating	the SOC back side is polished and antireflection coated for 2000 nm
Mounting option x denotes the type of mounting as follows:	

x = 0	unmounted
x = 12.7 g	glued on a gilded Cu-cylinder with 12.7 mm \varnothing and 4 mm \varnothing center hole
x = 25.0 g	glued on a gilded Cu-cylinder with 25. mm \varnothing and 4 mm \varnothing center hole
x = 25.4 g	glued on a gilded Cu-cylinder with 25.4 mm \varnothing and 4 mm \varnothing center hole
x = FC	mounted on a 1 m single mode fiber cable with FC connector

Spectral reflectance, transmittance and absorptance

