

General Waveguide Characteristics

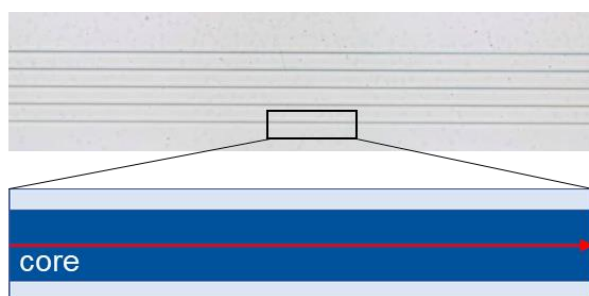
Material	Polymer
Waveguide Type	Step Index
Waveguide height	2.5 - 5 μm
Waveguide width	2 - 6 μm
Waveguide Pitch	$\geq 5 \mu\text{m}$ (depending on waveguide width)
Temperature range	-20°C / +85°C
Moisture resistance	85°C/85% r.H. for 1000h

Optical Characteristics

Refractive index (core/cladding)	1.539/1.523	@1550 nm
Modefield diameter	4 - 10 μm	(depending on core size)
Spectral range	850 ... 1600 nm	
Power loss (@ 850 nm):	0.05 dB/cm	
Power loss (@ 1310 nm):	0.4 dB/cm	
Power loss (@ 1550 nm):	0.5 dB/cm	
Minimal radius (@ 3 μm waveguides)	20 mm	(without additional loss)
Crossing loss	0.05 dB	(depending on layout)

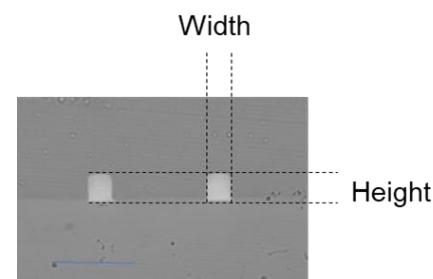
Panel Characteristics

Base material	FR4, Thermount, RCC, Copper, Glass, Polyimide (flex)
Thickness	0.1 ... 5 mm
Width	up to 375 mm x 250 mm (usable optical area)



Pitch

Width



Height