



WAVEOPTICS

**OM2**

Optical Fiber Specifications

**TECHNICAL  
INFORMATION**



## WAVEOPTICS FIBER (L) OM2

Optical fiber specifications before cabling

CHARACTERISTICS		WAVEOPTICS OM2
Fiber Code		L
Attenuation	850 nm	$\leq 2.3$ dB/km
	1300 nm	$\leq 0.7$ dB/km
	1383 nm	$\leq 2.0$ dB/km
Attenuation Discontinuities	1330 nm	$\leq 0.05$ dB
Bandwidth (Overfilled Launch)	850 nm	$\geq 750$ MHz*km
	1300 nm	$\geq 500$ MHz*km
Laser EMB	850	$\geq 1000$ MHz*km
Numerical Aperture		$0.2 \pm 0.015$
Group refractive index	850 nm	1.483
	1300 nm	1.478
Zero dispersion wavelength $\lambda_0$		$1295 \leq \lambda_0 \leq 1340$ nm
Marcobend attenuation 100 turns @ 37.5 mm radius	850 nm	$\leq 0.05$ dB
	1300 nm	$\leq 0.15$ dB





## Physical Characteristics

CHARACTERISTICS	WAVEOPTICS OM2
Core diameter	$50 \pm 2.5 \text{ } \mu\text{m}$
Cladding diameter	$125.0 \pm 1.0 \text{ } \mu\text{m}$
Core-cladding concentricity error	$\leq 1.5 \text{ } \mu\text{m}$
Cladding non-circularity	$\leq 1 \%$
Coating diameter	$242.0 \pm 7 \text{ } \mu\text{m}$
Coating-cladding concentricity error	$\leq 10 \text{ } \mu\text{m}$

## Environmental Characteristics

CHARACTERISTICS	CONDITIONS	WAVEOPTICS OM2
Temperature cycling	$-60^{\circ}\text{C}$ to $+85^{\circ}\text{C}$	$\leq 0.1 \text{ dB/km}$
Water immersion	$23^{\circ}\text{C} \pm 2^{\circ}\text{C}$	$\leq 0.1 \text{ dB/km}$
High temperature aging	$85^{\circ}\text{C} \pm 2^{\circ}\text{C}$	$\leq 0.1 \text{ dB/km}$

