

ACMM50 OM4

50/125 Multimode Optical Fibre

Dimensional Specifications

Core Diameter	50 +/- 2.5 μm
Cladding Diameter	125 +/- 1 μm
Coating Outside Diameter	245 +/- 10 μm
Cladding Non-Circularity	$\leq 1\%$
Core Non-Circularity	$\leq 6\%$
Concentricity Error :	
Core / Cladding	$\leq 1\ \mu\text{m}$
Cladding / Coating	$\leq 10\ \mu\text{m}$

Mechanical Specifications

Proof test of Colored Fibre	1% strain during 1s (0.69 GPa)
Dynamic Tensile Strength	$\geq 45\ \text{N}$
Dynamic Fatigue (nd)	≥ 20
Coating Strip Force	$1.2 < F_{\text{med}} < 3\ \text{N}$ & $F_{\text{max}} < 5\ \text{N}$

Cabled Fibre Attenuation *

$\lambda = 850\ \text{nm}$	$\leq 2.7\ \text{dB/km}$
$\lambda = 1300\ \text{nm}$	$\leq 0.8\ \text{dB/km}$
Attenuation Uniformity	$\leq 0.2\ \text{dB}$

Environmental Specifications

Temperature Cycling Performance [-60 to 85°C]	$\leq 0.2\ \text{dB/km}$ à 850 & 1300nm
Aging 30 days at 85°C	$\leq 0.2\ \text{dB/km}$ à 850 & 1300nm
Aging : 30 days to 85°C and 85% relative Humidity	$\leq 0.2\ \text{dB/km}$ à 850 & 1300nm

Effective Group Index

@ 850 nm	1.482
@ 1300 nm	1.477

Optical Specifications

Numerical Aperture	0.2 +/- 0.015
Bandwidth (LED)	
$\lambda = 850\ \text{nm}$	$\geq 3500\ \text{Mhz.km}$
$\lambda = 1300\ \text{nm}$	$\geq 500\ \text{Mhz.km}$
Bandwidth (VCSEL)	
$\lambda = 850\ \text{nm}$, DMD measure	$\geq 4700\ \text{Mhz.km}$

* The optical transmission values are warranted for lengths of cable exceeding 1000 meters

Multimode Fibres, IEC/EN 60793-1, IEC/EN 60793-2, EN50173 and ISO CEI 11801 full compliant
Compatible with networks standards, FDDI, Ethernet, Fast Ethernet, Giga Ethernet, Token Ring, ATM ...