

#### **OS2 Duplex Fibre Leads, LSZH Jacket**



## DESCRIPTION

YOFC EasyBand bending insensitive single mode fibre encompasses all the features of FullBand fibre and provides good resistance to macro-bending. It has low macro-bending sensitivity and low water-peak level. It is comprehensively optimized for use in O-E-S-C-L band (1260 - 1625 nm).

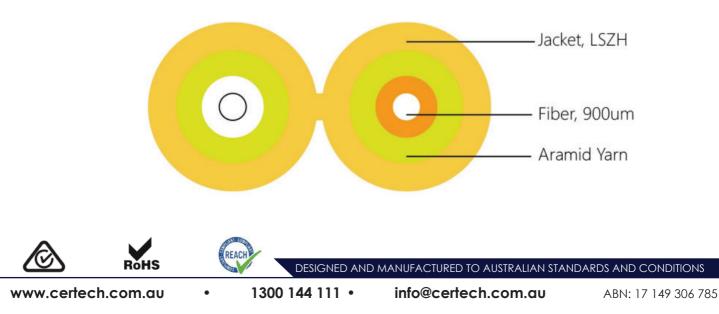
It offers good resistance to additonal losses due to low macrobending in the 1600 nm wavelength region. This not only supports L-band applications but also allows for easy installation without excessive care when storing the fibre, for example, in splicing cassettes.

# APPLICATION

- Short pitch cables for special application
- High performance optical network operating in O-E-S-C-L band
- High speed optical routes in buildings (FTTx)
- Cables with low bending requirements

## FEATURES

- Low attenuation satisfying the operation demand in O-E-S-C-L band
- Good bending loss resistance at short radius bends
- Low micro-bending loss for highly demanding cable designs including ribbons
- Low PMD satisfying high bit-rate and long distance transmission requirements
- Accurate geometrical parameters that ensure low splicing loss and high splicing efficiency





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CHARACTERISTICS	CONDITIONS	SPECIFIC VALUES	UNITS	
Optical Characteristics	Optical Characteristics			
Attenuation	•		[dB/km] [dB/km] [dB/km] [dB/km] [dB/km]	
Attenuation vs. Wavelength Max. <i>a</i> difference	1285-1330 nm 1525-1575 nm	<0.03 <0.02	[dB/km] [dB/km]	
Dispersion coefficient	1285-1340 nm 1550 nm 1625 nm	>-3.0 <3.0 <18 <22	[ps/(nm - km)] [ps/(nm - km)] [ps/(nm - km)]	
Zero dispersion wavelength		1312 ± 10	[nm]	
Zero dispersion slope		<0.090	[ps/nm <sup>2</sup> - km)]	
Typical value		0.086	[ps/nm <sup>2</sup> - km)]	
PMD Maximum Individual Fibre Link Design Value (M=20, Q=0.01%) Typical Value		<0.2 <0.1 0.04	[ps ∕√km] [ps ∕√km] [ps ∕√km]	
Cable cutoff wavelength		<1260	[nm]	
Mode field diameter (MFD)	1310 nm 1550 nm	9.0 ± 0.4 10.1 ± 0.5	[um] [um]	
Effective group index of refraction $(N_{etf})$	1310 nm 1550 nm	1.466 1.467		
Point discontinuities	1310 nm 1550 nm	<0.05 <0.05	[dB] [dB]	
<b>Geometrical Characteris</b>	stics	·		
Cladding diameter		124.8 ± 0.7	[um]	
Cladding non-circularity		<0.7	[%]	
Coating diameter		245 ± 5	[um]	
Coating-cladding concentricity error	r	<12.0	[um]	
Coating non-circularity		<6.0	[%]	
Core-cladding concentricity error		<0.5	[um]	
Curl (radius)		>4	[m]	
Delivery length		2.1 to 50.4	[km/reel]	
Environmental Characte	ristics (1310 nm, 15	50 nm & 1625 nm)	1	
Temperature dependance Induced attenuation at	-60°C to +85°C	<0.05	[dB/km]	
Temperature - humidity cycling Induced attenuation at	-10°C to + 85°C, 98% RH	<0.05	[dB/km]	
Watersoak dependance Induced attenuation at	23°C, for 30 days	<0.05	[dB/km]	
Damp heat dependance Induced attenuation at	85°C and 85% RH, for 30 days	<0.05	[dB/km]	
Dry heat aging at 85°C		<0.05	[dB/km]	
Mechanical Specificatio	Mechanical Specification			
Proof test	off line	>9.0 >1.0 >100	[N] [%] [kpsi]	
Macro-bend induced attenuation	<u> </u>	ı		

RoHS

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REACH

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DESIGNED AND MANUFACTURED TO AUSTRALIAN STANDARDS AND CONDITIONS



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100 turns around a mandrel of 50 mm diameter	1550 & 1625 nm	<0.05	[dB]
10 turns around a mandrel of 30 mm diameter	1550 nm	<0.1	[dB]
10 turns around a mandrel of 30mm diameter	1625 nm	<0.3	[dB]
1 turn around a mandrel of 20mm diameter	1550 nm	<0.1	[dB]
1 turn around a mandrel of 20mm diameter	1625 nm	<0.5	[dB]
Coating strip force Typical average force peak force		1.7 >1.3 <8.9	[N] [N]
Dynamic stress corrosion susceptibility parameter nd (typical)		>20	

FLLCLCOS2XX	Description	Connector Type
	LC - LC OS2 Duplex Fibre Patch Lead	LC to LC
**	Lengths available (metres)	
	0.5, 1, 1.5, 2, 3, 5, 7, 10, 15, 20, 25, 30, 40, 50m	

FLLCSCOS2XX	Description	Connector Type
	LC - SC OS2 Duplex Fibre Patch Lead	LC to SC
	Lengths available (metres)	
	0.5, 1, 1.5, 2, 3, 5, 7, 10, 15, 20, 25, 30, 40, 50m	

FLSCSCOS2XX	Description	Connector Type
<u>11 11  </u>	SC - SC OS2 Duplex Fibre Patch Lead	SC to SC
	Lengths available (metres)	
$\mathbf{T}\mathbf{T}$	0.5, 1, 1.5, 2, 3, 5, 7, 10, 15, 20, 25, 30, 40, 50m	
V V		

FLSCASCAOS2XX	Description				Connector Type
	S	SCA - SCA OS2 Duplex Fibre Patch Lead			SCA TO SCA
		Lengths availal	ole (metres)		
	0.5,	1, 1.5, 2, 3, 5, 7, 10, 1	5, 20, 25, 30, 40, 50m		
VV					
		REACH			
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