DATASHEET

12-144F Micro-fiber cable

Small Size cable for HD cabling solution





2018|En version1.0

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Cable structure



12	24	Flat 24	36 & 48 &72	72	96	144
/	/	2.9±0.1	2.9±0.1	2.9±0.1	2.9±0.1	2.9±0.1
2.9±0.1	2.9±0.1	(4.2±0.3)x(7.6±0.4)	9.0±0.3	11.2±0.3	13.5±0.3	17.5±0.3
(LSZH6.3)	(LSZH9.0)	(LSZH 52)	(LSZH 93)	(LSZH 106)	(LSZH 146)	(LSZH 260)
/(PVC 4.8)	/(PVC 7.5)	/(PVC 44)	/(PVC 86)	/(PVC 96)	/(PVC 135)	/(PVC 224)
-20°C ~+60°C						
100N/30N 100N/30N 200N/80N 1000N/300N						
	12 / 2.9±0.1 (LSZH6.3) /(PVC 4.8)	12 24 / / 2.9±0.1 2.9±0.1 (LSZH6.3) (LSZH9.0) /(PVC 4.8) /(PVC 7.5) 100N/30N 100N/30N	12 24 Flat 24 / / 2.9±0.1 2.9±0.1 2.9±0.1 (4.2±0.3)x(7.6±0.4) (LSZH6.3) (LSZH9.0) (LSZH 52) /(PVC 4.8) /(PVC 7.5) /(PVC 44) 100N/30N 100N/30N 200N/80N	12 24 Flat 24 36 & 48 & 72 / / 2.9±0.1 2.9±0.1 2.9±0.1 2.9±0.1 (4.2±0.3)x(7.6±0.4) 9.0±0.3 (LSZH6.3) (LSZH9.0) (LSZH 52) (LSZH 93) /(PVC 4.8) /(PVC 7.5) /(PVC 44) /(PVC 86) 100N/30N 100N/30N 200N/80N	12 24 Flat 24 36 & 48 & 72 72 / / 2.9±0.1 2.9±0.1 2.9±0.1 2.9±0.1 2.9±0.1 2.9±0.1 (4.2±0.3)x(7.6±0.4) 9.0±0.3 11.2±0.3 (LSZH6.3) (LSZH9.0) (LSZH 52) (LSZH 93) (LSZH 106) /(PVC 4.8) /(PVC 7.5) /(PVC 44) /(PVC 86) /(PVC 96) -20°C ~+60°C	12 24 Flat 24 36 & 48 & 72 72 96 / / 2.9±0.1 2.9±0.1 2.9±0.1 2.9±0.1 2.9±0.1 2.9±0.1 2.9±0.1 (4.2±0.3)x(7.6±0.4) 9.0±0.3 11.2±0.3 13.5±0.3 (LSZH6.3) (LSZH9.0) (LSZH 52) (LSZH 93) (LSZH 106) (LSZH 146) /(PVC 4.8) /(PVC 7.5) /(PVC 44) /(PVC 86) /(PVC 96) /(PVC 135) -20°C~+60°C

Features:

- Non-metallic construction
- Small out diameter
- Lightweight
- Easy to strip
- Low attenuation
- Physically soft
- Tensile strength and long term signal transmission stability enhanced by aramid yarn component
- Convenient for installation, operation, and maintenance

Application:

- Data center cabling
- Cabling in optical communication equipment room for connecting distribution frames
- For assembling into pigtails, movable connectors and patch cords



Optical fiber technical parameters-SMF

ltem	Unit	Specification	
Attonuction	dP/lum	1310nm≤0.4 ;	
Allenuation		1550nm≤0.3	
Dispersion	Do (nm km	1285~1330nm≤3.5,	
Dispersion	PS/1111. K11	1550nm≤18.0	
Zero dispersion wavelength	Nm	1300~1324	
Zero dispersion slope	Ps/nm. km	≤0.095	
Fiber cutoff wavelength	Nm	≤1260	
Mode field diameter	Um	9.2±0.5	
Mode field concentricity	Um	≤0.8	
Cladding diameter	um	125±1.0	
Cladding non-circularity	%	≤1.0	
Coating/cladding concentricity error	Um	≤12.5	
Coating diameter	um	245±10	
	1550nm,	≤0.5 dB	
Bending, dependence induced attenuation	1turns,32mm diameter		
	100rums,60mm diameter		
Proof test	kpsi	≥100	



ITU recommendation G.657 specifies two classes of single-mode bend insensitive fiber patch cables: G.657 A and G.657 B. Each category (A and B) is then divided into two sub-categories: G.657.A1, G.657.A2 and G.657.B1, G.657.B2. The minimum bend radius of G.657.A1 fibers is 10 mm, of the G.657.A2 and G.657.B1 fibers is 7.5 mm and of the G.657.B2 fibers is 5 mm. Among, ITU-T G.657.A1 and ITU-T G.657.A2 fibers are fully compliant with ITU-T G.652.D fibers.

Optical fiber technical parameters-MMF

Item	Unit	Specification		
Attenuation	dB/km	850nm≤3.5		
		50/125µm	62.5/125µm	
Bandwidth	MHz*km	850nm≥200	850nm≥160	
		1300nm≥200	1300nm≥200	
Step	dB	≤0.1		
Irregularities over fiber length and	dB	≤0.1		
point discontinuity				
Difference beelseetter exefficient	dD ///ma	50/125µm	62.5/125µm	
	QB/KIII	≤0.08	≤0.1	
Cladding diameter	um	125±1.0		
Cladding non-circularity	%	≤1.0		
Coating/cladding concentricity error	Um	≤12.5		
Coating diameter	um	245±10		
Panding, dependence induced attenuation	850nm, 1300nm	≤0.5 dB		
bending, dependence induced attenuation	100 turns,75mm diameter			
Proof test	kpsi	≥100		

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Technical Data-Transmission

Fiber type	Attenuation			OFL bandwidth	Effective modal bandwidth	10 Gigabit Ethernet SX	Min bend radius	
	1310/1550nm 850/13		300nm	850/1300n				
Conditions	Typical	Maximum	Typical	Maximum	m	850nm	850nm	/
Unit	dB/km	dB/km	dB/km	dB/km	MHZ.km	MHZ.km	m	mm
G652D	0.36/0.22	0.5/0.4						16
G657A1	0.36/0.22	0.5/0.4						10
G657A2	0.36/0.22	0.5/0.4						7.5
50/125			3.0/1.0	3.5/1.5	≥500/500			30
62.5/125			3.0/1.0	3.5/1.5	≥200/500			30
OM3			3.0/1.0	3.5/1.5	≥1500/500	≥2000	≤300	30
OM4			3.0/1.0	3.5/1.5	≥3500/500	≥4700	≤550	30
BIF-OM3			3.0/1.0	3.5/1.5	≥1500/500	≥2000	≤300	7.5
BIF-OM4			3.0/1.0	3.5/1.5	≥3500/500	≥4700	≤550	7.5

Cable sheath marking

Printing at each 1M interval on the cable sheath The standard printing contents are as below, alternative contents available on request Meter mark Cable model Fiber count Company/Brand name Manufacture month and year

Labelling of Reel

Qualification certificate glued on side of reel with the following content Alternative labelling content available on request

Product specs (name) Order No. Part No. Inspection No. Length Inspection result Inspection date Net weight Gross weight Gross weight Volume

Package

OMC offers standardized packaging of cable, and we can ship it as soon as possible for adequate inventory. We pack the cable with roll, then put it into carton. The package provide good protection for cable. Usually we only attach test report on the out package of the cable, but we could also mark as your requirements.

